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A HISTORY OF RELIGIOUS ARCHITECTURE

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S. Smith
QUEEN MARGARET, LINCOLN CATHEDRAL

(Frontispiece, see page 212)

A HISTORY OF
RELIGIOUS ARCHITECTURE



by
ERNEST SHORT

*Third, revised edition,
with 63 pages of plates and 19 plans*

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TO MY WIFE

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INTRODUCTION

"I find I never weary of great churches. It is my favourite kind of mountain scenery. Mankind was never so happily inspired as when it made a cathedral ; a thing as single and spacious as a statue at first sight and yet, on examination, as lively and interesting as a forest in detail."

R. L. STEVENSON.

Stevenson's spirited suggestion of adventure in each cathedral and minster-church has an application far beyond the Christian House of God. Any building which serves as a symbol of the immanence of the All-Good in nature and humanity affords the same lively variety of interest. There are forms of art which are the possession, as they were the creation, of a few craftsmen and a limited number of instructed æsthetes. Not so the House of God. A shrine, a temple or a church, just because it is a place for communal worship, is part of the great picture-book of humanity. If we are to enjoy and understand, we must search with the uncritical joy of children, not for some new æsthetic shiver, but for thoughts and emotions which testify alike to the beauty and to the goodness of human life. We must know the faith and thought of the builders, as well as the craft with which the walls were built and the space was roofed.

Accordingly, it is with the ever-changing experience of man, bodied forth in ever-varying architectural and sculptural forms, that this story of "The House of God" is concerned. It seeks to show how the chief manifestations of religious art are connected with outstanding social, political, and geographical circumstances ; to gauge the emotions and thoughts embodied in various types of buildings, and the actions and reactions which created the different national styles ; always striving to penetrate through the artistic production to the intellectual and emotional circumstances which shaped and vitalised it. Convinced of the general sameness of human lot through the ages, we would know how the human constants—hunger and labour, seed-time and harvest, love and death, faith and doubt—operated to produce this temple or that cathedral. Though the primary interest is Christian, no religious architecture is excluded. As Abul-Fazl wrote above the portal of his temple in Kashmir in the days of the Emperor Akbar :—

"O God, in every temple I see people that see Thee,
And in every language I hear they praise Thee.
If it be a mosque, people murmur the holy prayer ;
And if it be a Christian church, the bell is rung for love of Thee.—
Sometimes I frequent the Christian cloister and sometimes the
mosque,
But it is Thou whom I seek from temple to temple."

INTRODUCTION

The basic principle of architecture is found in the capacity of matter to bear a weight and span a space. The essential forms are the column or wall which carry the weight, and the arch or beam which span the space. From the time the nomad of the steppes set up his first tent-pole, the capacity to bear a weight and cover a space has been an essential element in every building. Even earlier, in the cave hollowed by primitive man, the cave walls represented the columns and their supporting buttresses, while the rock of the roof was the equivalent of the spread of the arch or beam between its supports. The first law of architecture is that every burden must have its due support and every support its due burden.

The philosophy arising from this thought was beaten out by Schopenhauer in a famous essay in which he described the column as the symbol of the will to work. "I am here to hold up this roof," murmurs the column. Ever-struggling with the forces of gravitation, the column has taken on a measure of the humanity of those who set it to its work. When effort, thought and emotion are in harmony, the resulting art makes its deepest and most permanent impression. Among the works of man, there is no more perfect evidence of humanity's capacity to subdue matter and master the ever-present forces of gravity than a nobly-planned house in which a god may fitly be worshipped. When the structural forms and proportions of such a building can be related to the experience of the men who devised and fashioned them, a shrine, a temple, or a church is really understood.

The column in its simplest form may be seen at its work in a Greek temple. Two rows of Doric columns and between them the lintel holding up the roof. As Schopenhauer said, we see in good Greek architecture each part—column and lintel—attaining its end in the most direct and simple way. But the splendid lucidity of the Parthenon also tells of a civilisation in which intellectual clarity was a dominant characteristic. Without that knowledge, the riddle of a Doric temple is not to be solved. Every art has its own method of touching the imagination and each art is more clairvoyant in some respect than any other. Sculpture and lintel architecture proved specially fitted for the expression of Greek experience, and those who cannot find beauty in Greek social life usually fail to find it in Greek art. What is austere in temple or statue seems empty, so that the seeker is tempted to echo the exuberant dictum of Morris regarding the Parthenon—"A table on four legs ; a damned dull thing !"

Yet William Morris was ready enough to find beauty in the by-ways of the past and longed to diffuse it over every phase of human activity. What escaped him in connection with the temples of the Greek world were Marathon and Salamis. It was not æsthetic grace but the memory of victory over the hordes of the barbaroi which made the Parthenon a House of God for the Athenian, a thing which was religious in its power to enforce and maintain a strenuous moral ideal. The Greek saw in the Parthenon human thought and emotion taking a visible shape which satisfied his longing for a power beyond man, surely the very quality which makes architecture religious. The thought and

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emotion in the temples of the Acropolis or the five shrines of Girgenti differ in many respects from the ideas enshrined in a Gothic cathedral, but both are in a high degree religious. As Maximus of Tyre wrote : "The Greek custom is to portray the gods by the most beautiful things in the world—pure material, the human form and consummate craft. The idea of those who make divine images in human form is entirely reasonable, since of all things, the spirit of man is nearest to the gods and most god-like."

The fearless intellectuality and clarity of vision which the Greeks applied to the pursuit of knowledge, they used for the refinement of a Doric temple. At his best, the Greek builder did not press beyond the point where perfect expression was possible ; vagueness was abhorrent to him and, instinctively, the Greek felt that the verge of the unknowable was the point where the full expression became impossible. He did not experiment in the costly Gothic method of failure and repair, and so was spared the final catastrophe of Beauvais. Nor did he forget he was building for men and not for Cyclops. At his best he refrained from emulating the megalithic art of the Egyptians, though the habit of setting great rocks one above another had long been familiar to the Greek world. A Doric temple is essentially the architecture of intellectual sanity ; it was built for men who understood what freedom is and what it implies.

As the Parthenon was the expression of a people inspired by the prickling desire for intellectual truth, so the churches of Christendom in the Gothic Age were the natural expressions of an age of faith. At Bourges, at Amiens, at Chartres, we watch the imaginations of disciplined artists steadily working out a vast, yet unified, series of ideas which embody all the phases of religious emotion to be found in Christendom at the time of the Crusades. Forget the Catholic Church ; forget the Crusades ; and the minster and communal churches of Western Europe lose their deepest meaning. And not the walls, piers and vault alone, but all the arts associated with architecture must be borne in mind if the adventuring spirit is to learn the full meaning of a Gothic cathedral. Wall paintings, stained glass, and stone carvings were part of a whole which was greater than the building itself. A mediæval architect was the trainer of a team, not the mere designer of a core, working with ruler and compass miles away from the actual building, as is so frequently the case with the architect of to-day. The carvings on the porches of a Gothic cathedral were more than surface decoration. They summed up the science, history and dogma of Mother Church for children, who learnt with the eye, rather than the ear. Sculpture, wall-paintings, and tapestry hangings were an integral part of liturgy. The vision of a thousand years found expression in the three great doorways of Chartres and their symbolism was plain because the Gothic age regarded the whole world as a symbol of the thought of God. As M. Emile Mâle has said, the sculptor was as skilful as the theologian in spiritualising material objects. As his craft grew in power he desired to include all human experience within the House of God. In Sainte Chapelle, Saint Louis set statues of the twelve apostles, one against each of the columns

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of the chapel, signifying that the apostles were the true pillars of the Church. A great tract of gospel history was suggested by the twelve statues, yet Saint Louis added windows to Sainte Chapelle with a thousand medallions. In a single chapel, the painters, sculptors, glass-makers and tapestry-weavers recalled all the Law, the prophecies and the Gospel. Who shall say that this Bible illustration in porch, nave, or window is of less significance than the jewelled light, or the mysterious beauty of the great porches "scooped into the depth and darkness of Elijah's cave at Horeb"? Nor can the appeal of sense and spirit be divorced from the intellectual understanding of the building in terms of support and burden, thrust and balance, weakness and power, arising from structural requirements. Full understanding comes from remembering the craft element, the appeal to the senses and the uplift given to mind and spirit. The best art satisfies the body that creates, the mind that understands, and the spirit which illuminates.

Mention has been made of the megalithic art of Egypt. The piling of great stones one upon another was common in the Mediterranean area in early historic times, and the Egyptians used the architecture of mass and the statuary of great stones as a definite aesthetic *motif*. In this they were followed by the Maya of Central America when they raised their temples to the Sun God and other powers of the natural world. At the moment this argument is not concerned with the belief of Professor Elliot Smith and Mr. Perry that the Maya culture was actually derived from Egypt. In prehistoric times there may have been navigators bolder than Magellan or Drake who carried the secret of Egyptian culture across the Pacific to Peru, Central America and Mexico, but this is still doubtful. What is certain is that Egyptian and Maya alike were social systems in which the priest-king and the priestly hierarchy of the Sun God were dominant. In a moment of insight Amiel said, "Great men are the true men—the men in whom Nature has succeeded." We begin to grasp the problem of Egyptian and Mayan architecture when we realise that life in the Nile Valley and in the jungle clearings of Yucatan and Guatemala did not make for true men, whereas in Greece, Nature succeeded. Superb craftsmen as they were, the Egyptians failed to animate their architecture or decorative sculpture with the ideas which make humanity fully human. Whereas the Greek craftsman released from the stone column and the carved entablature the joy of ordered effort, in Egypt, the craftsman's joy was swallowed up in the mighty pride of a ruling Pharaoh or the high priests of Amon Ra. The satisfaction of the Athenian in the exercise of his mental and emotional faculties was not for the Egyptian. Safe within their desert walls, the Egyptians escaped a succession of disasters which educated the Greeks. "The frog in the well knows nothing of the great sea," says the Japanese proverb.

The ultimate truth of these general propositions cannot be tested by a few selected cases. All the outstanding schools of religious architecture must be passed in review. Was the Temple of Herod, in truth, a Jewish Parthenon, or did the genius of the Jews, a God-fearing people if ever there was one, build Zion in the strophes of their poet-prophets rather

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than in stone ? There is insight to be gained from the negative evidence in such an enquiry. It by no means follows that the most religious people build the most significant House of God. Rome, whose builders developed the dome into an architectural feature of sublime unity and brooding beauty—what was its contribution to religious architecture ? The development of the Roman basilica into the Christian Church, too, is a problem rich in interest, as is the change from Romanesque to Gothic. The growth of a priestly hierarchy necessitated a chancel and with this went a tendency to exclude the people from the holy of holies about the altar, a change foreshadowed by the fourth canon of the Second Council of Tours, in A.D. 567, which forbade lay folk to stand among the clergy at vigils or at mass, the sanctuary being only open to the laity for communion. The purpose of the transepts in ritual would seem to have been the necessity for space for marshalling communicants, though they became a structural necessity when a central tower was added to a Romanesque church. These are a few of the problems which suggest themselves. The Moslem architecture of Spain and Northern India ; the churches of Moscow and Kiev, when Russia took up the mantle of Byzantium and became the acknowledged leader in the Orthodox Eastern Church ; the Italian city-states during the centuries of the Renaissance ; the iconoclasm of the early Reformation ; the churches of the French kings in the seventeenth century ; our own Christopher Wren, who endowed Franco-Italian architecture with the measure of flexibility necessary if it was to serve as a House of God for the reformed Anglican faith ; the people of the United States, too, faced with special problems which have arisen from their Puritan prejudices, and the absence of first-hand knowledge of the heritage of religious architecture which belongs to Europe. All these phases of architectural history call for survey, and the mention of them not only justifies the numerous references to political and social history in the pages which follow, but brings us from the past to the active present.

An old-time art effort is of small importance if it throws no light upon the problems of life to-day. Have the weakening of the primal faith and the sundering of art, science, and religion had no effect upon religious architecture and sculpture in our own time ? Surely they have. Coventry Patmore once asked whether the task of bearing the gospel message was not beyond the power of any craftsman ; he doubted, indeed, whether poetry, most expressive of all the arts, was capable of the task.

“ Can poetry attain to express the sweetness, sadness, or graces of life in any common passion—love, pity or the like ? What insanity then to write poetry and music about the Crucifixion.”

Coventry Patmore was wrong ; the thing has been done before and will be done again. Nevertheless, it cannot be denied that the weakening of the primal faith in deity and the division between art, knowledge, and religion have had serious consequences. When faith and its expression in art were a unity, craftsmen did right, as it were, by instinct. The pose of to-day, under which certain craftsmen pride themselves

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upon their superiority to their public, gives no such assurance. Yet the relation between a people and its art interested many nineteenth-century thinkers who watched democracy struggling into being after the Industrial Revolution, among them Ruskin and Morris, though both were less concerned with the historical than with the moral aspects of the problem. Sordid lives and ugly environment tend to kill the sense of beauty in a community, but it does not follow that the strength and beauty of Gothic art were due to exceptional moral worth in the people of Christendom at the time of the Crusades. There were ugly and tainted lives in the thirteenth century, but it chanced that the great body of human endeavour was guided by forces which were religious in origin. Where the forces in the body-social follow religious channels, there religious art in plenty arises. To-day, the public demand for churches is fully sufficient to employ every architect of real talent and enthusiasm, but is such public demand sufficient to ensure worthy work? Near Ilford after the first World War, a town of 120,000 people, Becontree by name, was built on a London County Council estate in the Chelmsford diocese—rising at the stroke of a municipal official's pen. Ten parishes were planned in Becontree and, in each, a stone church was eventually required. It was suggested that some of the unwanted City churches might be moved stone by stone and rebuilt at Becontree; Wren's church of St. Stephen, Coleman Street, for example, where Keats was baptised, with its carved communion table, altar rails and pulpit. Unhappily, St. Stephen's was destroyed by a bomb during the second World War and with it the treasures of Jacobean wood-work.

The vast destruction due to enemy action between 1939 and 1945 will bring many problems up for solution. Only too often in the recent past parish churches in Britain have been based upon plans which Greek, Roman, or mediæval builders evolved to meet their own needs, but which are only a medley of outworn styles for the people of to-day. Architecture has tended to lose its crowning satisfaction, the accidental, which gives the impression of a new thing growing from the soil for which it was devised. A fresh inspiration is called for.

The Great Exhibition of 1851 marked the end of the ages-long tradition under which architects, sculptors, and the rest of the builders' team were trained in connection with their job. Since, there have been artist-decorators of genius who recognised their duty to the public and what they themselves, in turn, could gain from a lively popular interest in their work. Nor is there any reason why their work should not be embodied in buildings where the people will frame and enforce their deepest beliefs regarding the mysteries of spiritual life. In that day the maker of a House of God will combine the science and organising capacity of Wren with the insight and temper of such a mystic as William Blake. Knowing that the innermost truths can only become familiar to the many in material form, he will lead his countrymen to the church door and allow them to seek their God in their own way. Nor will the architect work alone. With him will be the goldsmith, the sculptor, the tapestry-maker and other craftsmen. Mural painting and sculpture will become, not isolated works of art, but a vital part of the

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architectural scheme. John Sedding made an attempt when he enlisted the aid of Alfred Gilbert and Burne-Jones in beautifying Holy Trinity, Sloane Street. Giles Gilbert Scott is carrying through an even greater work at Liverpool.

It will not be forgotten that, though this study is primarily historical, religious architecture is a craft, and many of its satisfactions arise from realising the logical precision with which craft problems have been solved. The passages upon the Doric style in Greece and upon Romanesque and Gothic architecture in England and France are important in this connection. In general, the purpose of this book is to trace the ages-long effort to enclose and cover a space which should enshrine the idea of Godhead, remembering that craft, communal enthusiasm, organisation, and spiritual symbolism, all have their part in making beautiful the House of God.

A HISTORY OF RELIGIOUS ARCHITECTURE

CHAPTER I

THE FIRST GOD'S HOUSE ANCIENT EGYPT

Before the invention of agriculture, when the social organisation was that of wandering pastoral tribes, religious architecture only existed in embryo. Indeed, until community life developed considerably, the capacity for religious emotion itself was limited. Communal worship attains an intensity which is rarely found in individual worship and gives a peculiar reality to the things of the imagination with which the builder of a House of God is necessarily concerned. It is communal rather than individual religious belief and emotion which the student of religious art must understand. Nevertheless, the rudiments may be found even among savages. The Obibos of the African forests build elaborate mausoleums for their dead, roofed with palm leaves and decorated with painted pots, gourds and skulls, not omitting that final emblem of savage power, the umbrella. From such a tabernacle the Papuans of New Guinea evolved their *ravis*, with mangrove saplings as columns and a vaulting fashioned from a thatch of the leaves of the sago palm. The great Ravi at Kaimari is seventy feet high at the entrance and 380 feet long, being comparable with a mediæval cathedral in size. Over the entrance hang tufts of palm which serve as a charm against the entrance of evil spirits. At the rear of the building, where it slopes to a height of ten feet, is the "holy of holies," where the crocodile masks, bull-roarers and other magical paraphernalia are stored under the charge of the ancients of the tribe. Lastly, from the primitive tabernacle which their Aryan forefathers dedicated to the Spirit of Fire, the Buddhist priests evolved the domed memorial *stupa* as a symbol of the union of Buddha with eternity, carving the "hti" or sacred umbrella at the top as an emblem of the kingly power of the Buddha.

The common origin of all forms of sanctuaries is worthy of mention, though a detailed discussion regarding primitive places of worship is not essential to understanding the House of God as an expression of the faith of civilised communities. With the fact of the common origin goes the truth that there is no essential difference between the national deity and the godlet of the primitive village. Faith in the god and the godlet can exist side by side. The hill tribesmen of Manipur, a country where Hinduism is the state religion, build thatched huts or shrines of stone and foliage to their village godlets, though they remain devout Hindus. As a Hindu, the Manipuri calls in the Brahman for a birth, a marriage or a death, but, as a hunter or agriculturist, he trusts the godlets of the forest, the hills and the rivers. The same is true in Burma, where Buddhism is the state religion, but the little hut of the village *nat* is decorated daily with flowers, though worship

at the Buddhist pagoda may be regarded as a duty on more ceremonial occasions. The truth would seem to be that the godlet does not differ essentially from the national God, unless the values of Western Europe are taken as the standard of comparison. Then, indeed, thousands of years of experience and endeavour separate the hut of the godlet from a House of God. But the deeper truth is that God and godlet alike have their *lai-pham*, or god's place, within which is the *lai-sang*, or god's house, though the one has the beauty and worth of the Parthenon and the other is only a thatched hut.

The magical control of weather, the worship of trees, the ritual of the spell and the taboo, and other rites of the hunter and pastoralist do not require an elaborate shrine, and still less a temple for worship. Primitive man regarded himself as surrounded by multitudinous invisible beings, maybe spirits dwelling in natural objects or the spirits of the human dead. Feeling that his fate and fortune were at the mercy of these spirits, man sought to propitiate them, and thus primitive forms of religious art were associated with sympathetic magic. The earliest existing House of God may be such a wall-painted cave as the Font de Gaume in the Dordogne Valley or the Salle de Cartailhac of Tuc D'Audoubert. The Cavern of Altamira, near Santander, with its "magical" hunting scenes painted or engraved on the walls and roof, may justly be regarded as the Sistine Chapel of Aurignacian or Magdalenian man. It is to be noted that the gloom of the caves favoured the mood of fear which engenders faith. Note, too, that the animals represented were not lions and tigers, but beasts which a hunter would desire, such as the bison and the deer. The Cavern of Altamira would seem to have been a Holy House of the Bison Magic, where the priestly leaders of the hunt staged the seasonal festivals, which were believed to ensure good hunting. Attired in the horns of a stag, and donning the all-seeing eyes of the owl, the sharp ears of the wolf, the tail of the speedy horse and the paws of the strong bear, the Priest of the Cavern took the luck-giving images from the altar of the House of the Bison Magic and handed them out to the tribal hunters. The bison-magic caves of Altamira were a House of God, as primitive man understood the things of the spirit.

Very early, doubtless during the glacial age in Europe, man began to associate personalities with the forces of nature. The nomad hunters and fishers of the North told of Y'mir, the god of Chaos, who was born of the struggle between heat and cold, and how from Y'mir arose the race of the frost-giants. When Odin and his brother slew Y'mir, they flung the huge form into the Abyss of Abysses, where the blood of the god formed the water of the earth, his bones making the mountains, his teeth the rocks, his skull the firmament, his brain the clouds, his hair the plants, and his eyebrows the strong walls which defended the new race of gods against the frost-giants.

Men who lived in the pleasanter regions to the south pictured the Shaper of Things in very different forms. They regarded the Earth and the Heaven as the mother and father of all human and natural things. The shining vault of the sky became the Vedic god Dyaus.

The name is preserved in our own Tues-day, and the god later became the Zeus of the Greeks and the Jove of Rome. Zeus was also the rain and thunder god, and his worship was associated with the mighty oak which was blasted by the lightning of the Sky God. Accordingly the oak was conceived as his earthly abode.

An early sanctuary was a clearing in the natural forest. Sir James Frazer tells that among the primitive Finns such a clearing was enclosed by a fence and included a few trees upon which the skins of victims were hung. In the centre was the sacred tree, before which the priest of the grove offered praise or sacrifice. Passing to modern times, Colonel Shakespear, in an interesting paper in *Folk Lore* (December, 1913), has described similar forest shrines among the Manipuri on the borders of India and Burma. A typical example is the *lai-pham* of Nambishi, a village in South Tangkhul on the borders of Burma, a grove where cultivation rites are observed, whereas, at Langkhiyet, the rites celebrated in the *lai-pham* ensure good sport. At Langkhiyet, there is a circular pillar about thirty inches high in the centre of the enclosure, with a semicircle of upright stones on the north and two forked upright posts behind the pillar, these holding the poles on which the dead animals were borne to the god-place. A drum announces a "kill" to the villagers, and the hunter, bearing the head of the beast, marches around the *lai-pham* six times before handing it to the priest. Surely, as religious observance, such rites differ only in value from the ritual in a Greek temple or a Christian church, while, from the standpoint of the builder's art, the *lai-pham* points the way to the megalithic architecture of Stonehenge, and the temple courts of Luxor and Karnak. In the *lai-sang* of the Manipuri we come even nearer to the House of God of Christian acceptance. The god's house itself is a thatched hut, and nearby are long open sheds, on either side of which sit the villagers, the men on one side and the women on the other, in due order of seniority, "during the pleasing of the god," a description which would serve for many gatherings of the early Christian Church. In the house of the Manipur godlet the sacred fire is ever burning, and from this the first fire in every new home is lighted, linking the Manipuri *lai-sang* with the Roman temple of Vesta.

The rudiments of a House of God can also be recognised in the dairy temple of the Todas, herdsmen who live in the Nilgiri hills of Southern India, where an elaborate magical and religious ritual has developed from dairying operations. Here the herdsman-priest officiates in a place which is at once a dairy and a temple. Toda temples have varying degrees of sanctity corresponding to the sanctity of the buffaloes tended at each. Only on Mondays and Thursdays may a Toda villager approach the place where the sacred buffaloes and their keepers reside. Among primitive agriculturists the great Earth Mother seems to have been the earliest known deity, her function being to ensure fertility and hasten the growth of grain.

Magical practice and the worship of the Earth Mother do not favour the building of temples or churches. Religious architecture only came into existence when large settlements arose and man acquired a surplus

of production wherewith to satisfy the æsthetic sense. About the same time the development of communal life favoured the superexcitation of physical and emotional life which gave the individual a sense of new birth and domination by some unknown power which are still basic factors in religious ecstasy. To this day among the Australian aborigines, religious activities are practically confined to times when tribal assemblies are in being. The domestication of animals, which converted the savage pack into the patriarchal tribe, was followed by the garden, in which the germ of the æsthetic sense manifested itself.

These several factors—the fixed shrine, the growing delight in the beautiful, a deeper sense of religious ecstasy and fear and a surplus of production were, doubtless, present in some degree in the steppe lands of mid-Asia, Europe and Northern Africa, where civilisation first developed the forms which still characterise human society. But historical evidence is wanting to complete the story. When migration on the steppes became difficult owing to increase of population, some of the pastoralists came into the fertile valleys of the Tigris, the Ganges, the Hwang-ho and the Nile, where the "food-gathering" age gave place to the "food-producing" age, and it became possible for much bigger centres of population to arise. In each of these centres a religious art developed which we can recognise as akin to that which gives us the House of God of to-day. Shrines and temples arose in fixed places as towns came into being. Symbolic decoration developed in which representations of men replaced the non-representational decoration general among wandering tribesmen. In the new art of the river-valleys man became the dominant theme, because man, as opposed to nature, seemed the prime factor in success or failure. In small communities the craftsman can satisfy his own sense of what is fitting in craft, but in larger communities the artist works to satisfy communal, rather than personal inclinations. An art beset with human motives arose in Egypt, Mesopotamia, the Ganges Valley, and later in Greece and Italy. Meanwhile the non-representational art of the nomad herdsman and agriculturist continued among the less developed communities of the steppe, the forest and plain country of Germany, Scandinavia, Britain and Ireland, where it was still an active factor when the Christian Church developed in the Islands of the North.

EGYPTIAN TEMPLE ARCHITECTURE

Remembering that the germs of religious architecture were elsewhere, the story of the House of God may best begin with the temples of Egypt. In the Nile Valley the craft of irrigation was invented, and developed into a mighty engine, favouring the establishment of political power. In the Nile Valley, too, man tested the advantage of life in capital towns, and here we can trace the effects upon religious art of the passage from the life of a nomad hunter and pastoralist to the stage of settled agriculturist, with a fixed abode and a permanent cult centre. In Egypt, the scattered agricultural settlements were united into a single political

state under the rule of a priest-king, whose house was at once a temple, palace and judgment hall. Royal power and religious authority in the Nile Valley were inseparably connected with irrigation works. When a ruler organised the annual labours of his people, his subjects were readily persuaded that he was the actual source of the benefits which successful organisation bestowed. Just as the host-leader seemed the cause of success in war, so the director of irrigation took to himself the attributes of the mysterious spirits of the living and dead world who were supposed to determine fruitfulness in field and health in human life. After death the irrigation-director and host-leader was worshipped as one of the immortals, and his tomb tended to become a place of worship, as his home had been in life.

On its material side art is a product of leisure, leisure arising when the prime material necessities—food, shelter and clothing—have been satisfied. Leisure is a basic condition of art in any civilisation. The more the leisure, the more abundant the art fund. Of the peoples of the world, none has had more leisure than the Ancient Egyptians. Perhaps, none has had more art. At all times the isolation of Egypt has been remarkable. The protecting deserts, the encircling hills, the harbourless Delta and the rocky barriers of cataracts, all guaranteed to the Egyptian leisure and the fruit of leisure. These things were denied to the busy Babylonian trader, ever fearful of a raid from the warlike mountaineers on his eastern borders and compelled to travel great distances if his affairs were to prosper. With an ample water supply and long periods during which agricultural work was impossible, the Egyptian had more leisure than the leisurely Greek ; as the Greek, in his turn, had more leisure than the energetic Empire builders and organisers in Rome.

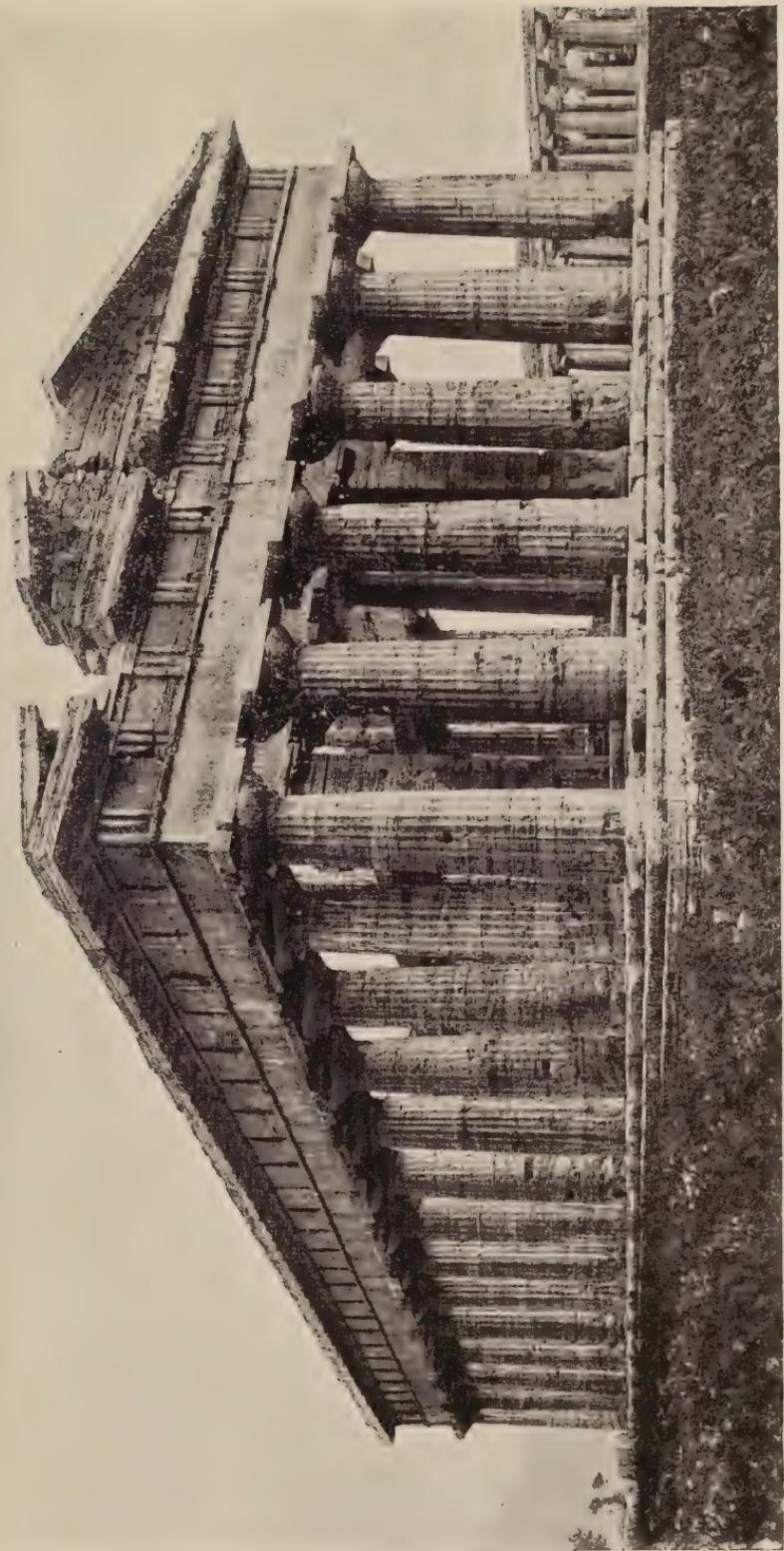
One of the first uses to which dwellers in the Nile Valley put this leisure was the construction of tombs for the dead. A tomb is not necessarily a temple, but in primitive worship, tombs and temples were nearly akin, and this was especially so in the case of an Egyptian king. In time, he had reigned on earth as a God and, at death, he became identified with the Sun God who controlled the Nile floods and assured fruitful crops to his land. The earliest religious structures were fragile shrines at which offerings to the spirits of the dead were made, little more enduring than the palm leaf mausoleums of the Obibos in the African forest. The primitive Egyptians decorated them with garlands of leaves and flowers, which may well have been the forerunners of the lotus and lily columns of a later age. An Egyptian column seems to have originated from a handful of papyrus stems, bound together with leaves at the base and breaking into bloom at the top. When stone buildings took the place of the early wood or brick shrine-tombs, King Zoser, the forceful king who established the supremacy of Memphis about 2950 B.C., built a vast six-terraced pyramid in the desert behind his capital, aided by his vizier, Imhotep. The terraced pyramid of Zoser was originally a multi-chambered subterranean tomb, fitted with a stairway from the ground level and covered with a superstructure of brick and rubble. In front was a temple shrine for offerings. During his long reign Zoser added rectangular additions above the original tomb,

until it became a huge terraced pyramid 195 feet high. A century or two later, Cheops (Khufu), the mighty Fourth Dynasty King who broke the power of the district governors and created the system of Egyptian bureaucracy, built the Great Pyramid at Gizeh. 2,300,000 blocks of limestone, averaging $2\frac{1}{2}$ tons apiece, went to the making of the tomb, which was 130 feet higher than St. Paul's. When the seven million tons of masonry were fitted together, they covered $13\frac{1}{2}$ acres and rose 480 feet above the desert, "firm as the heavens," in their casing of smooth white limestone. Each pyramid stood within a large, square paved court, surrounded by a wall and, to the east, was a mortuary chapel, similar to the temple of the Sphinx, which was itself attached to the Pyramid of Khafra. Connected with the temple was a richly endowed priesthood, charged with maintaining the ritual necessary for the happy after-life of the monarch, and the food, drink, and clothing required by the royal Ka.

The control of the canal system and the royal mines, which accustomed the Egyptians to the system of corvees, made the building of the Pyramids possible. Corvees for quarrying stone and moving building material followed corvees for cutting and clearing the national and municipal canals. Behind the Second Pyramid, barracks for 4,000 workmen have been traced, a long series of low mud-brick hovels, with thatched roofs. The workers were given food and clothing but no wage, say four pounds of bread daily, two bundles of vegetables and a roast of meat. Twice a month, a worker had a new linen garment. An inscription of the Sixth Dynasty at Denderah records, "I satisfied all artificers who did work for me on this tomb with bread and beer, clothes and all good things."

Work on a corvee was not regarded as slavery. The Egyptian suffered more from slavery of the mind and heart than from slavery of the body. The flat land and the vast spaces of the surrounding desert subjugated the imagination and chained the understanding to the concrete things of day to day existence. This was at once the strength and weakness of Egyptian art. For the vast majority of Egyptians there was no adventure. True there were sea-faring Egyptians, but they were few in number and the best of them made homes in the Mediterranean islands, Arabia, India and other far-away lands and did not return to stir the imaginations of their stay-at-home brethren. Most of the people followed a routine which aroused little interest because it entailed small responsibility and called for no exercise of the individual judgment. The agriculturist's year was mapped out as that of his father and grandfather had been. The warm climate led to a dense population; the dense population to cheap labour; cheap labour to serfdom. Liberty was neither wanted nor desirable. Without a powerful master, an Egyptian peasant or artisan was without a protector. A papyrus at Berlin tells of a peasant who addresses his lord as "the support of tottering walls, the support of that which falls, who takes the man who is without a master to lavish on him the goods of his house—a jug of beer and three loaves each day."

"Soft countries," wrote Herodotus, "are wont to produce soft men."



A GREEK TEMPLE : PÆSTUM

(see page 4)



A PRIMITIVE SANCTUARY. "LAIPHAM", BURMA

This is what the comfort-giving Nile did in Egypt. Recall how different were the conditions in ancient Attica, where life was far from soft but where Nature bred hard men. Whereas the social order in Attica was flexible, in Egypt it was fixed. Whereas in Athens, the ideal was an unfolding of every capacity of the individual, in Egypt the ideal was the due use of corporate effort. In Athens, every experience from the outer world was welcomed, whereas, in Egypt, the priesthood and bureaucracy regarded every new thing as likely to vex the calm established by centuries of unquestioning obedience. In Egypt, progress was sacrificed to order ; in Attica, order was of less account than progress. The one gave the world the ever-during pyramids ; the other the Parthenon.

As we think of it, the cutting and transport of these great monoliths and their erection into a vast, unmeaning pyramid become, not more, but less wonderful. The Egyptian pharaoh had command of unlimited labour and used it. The astonishing thing is that, for thousands of years, the mass of the Egyptian people were willing that this should be so. At any one time, there were in Egypt a few score of outstanding men, the Pharaoh, his prime-minister, the leading officials and the high priests of the greater temples. There was also a handful of master-sculptors, painters and architects, but they were too few in number to foster a great art effort. When compared with a Greek shrine, a Gothic church or even with the temples which arose later in Egypt itself, the Great Pyramid must be confessed empty of idea. It does not even express its size.

The conquerors and builders of the Fourth Dynasty passed away and were succeeded by rulers who came under the domination of the priests of Rā, the Sun God. The worship of Ra was not a popular religion like that of Osiris, Isis and Horus. Rather, it was a cult of the upper classes which established itself as a state religion. At the time of the early pyramid builders the cult of the Sun God had its centre at On, better known as Heliopolis, where a solar calendar was devised, based upon the date, July 19th, on which the Dog Star, Sirius, rises. The solar calendar gave the people of the Nile Valley a uniform agricultural year and replaced the earlier lunar calendar and may have led the priests of the Sun God at Heliopolis to the invention of the Nilometer. In any case the worship of the local sun god of On became associated with political power, not only in the district of Heliopolis but throughout Egypt. The pre-dynastic rulers of On seem to have been the high priests of the Sun God, and later associated themselves with the deity himself, as earlier rulers had tended to become associated with vegetation or fertility gods. In the end the priests identified the King of All Egypt with the Sun God and taught that through his veins flowed "the life fluid of Ra, the gold of the gods and the luminous essence from which is the source of all vitality, strength and wisdom." When the capital of united Egypt was fixed at Memphis, the City-God of On became the chief god of Egypt, and provincial deities tended to be identified with the Sun God. Local temples were built on the pattern of the temple at On and the liturgy practised in them was based upon the Heliopolitan pattern.

When the ruling Dynasty moved to Thebes, the worship of the Sun God became the centre of an organised national church. An inventory of the time of Rameses III. shows that the temples of Egypt had 107,000 slaves. The sacred endowment amounted to three quarters of a million acres, that is, one-seventh of the cultivable land, almost all of which belonged to Amon-Ra, the Sun God. Under the famous Eighteenth Dynasty Kings, the high priest of Amon-Ra was the chief vizier of the king and all the high offices of state were held by members of the same priestly caste.

Thebes was built at a spot where the desert on the west sheered away to the Libyan hills, leaving a broad plain. To-day, it is represented by four great groups of ruins. On the west of the Nile, Medinet Habu and Kurnah; on the east, Luxor and Karnak. The Theban kings were not pyramid-builders; they were buried in the slopes of the western hills; instead of mighty tombs they built temples, represented by the four groups of ruins. On the western bank of the Nile is the Ramesseum, with the sixty-foot Colossus to which Shelley wrote his "*Ozymandias*." Opposite is Luxor, including the beautiful forecourt of Amenhotep III., with its clustered papyrus bud columns, and Karnak, with a group of temples built by the kings of the twelfth and eighteenth dynasties. The royal conquests in Syria did little good to Egypt, but they enriched the sun-god, Amon, whose coffers were filled with Syrian booty. Asiatic slaves were brought in to work upon the temples, when the supply of Egyptian labour was insufficient. Temple after temple arose around the house of Amon at Karnak, which itself arose around the sacred lake, a remnant of the Nile, which had once flowed over the site of the temple.

An Egyptian House of God was not a place of public worship; it was primarily a royal oratory, raised by a king as a home for his patron deity. At first, it was of woven wattle; later a gloomy hall, covered by a slightly vaulted roof. Finally, it became a vast aggregation of courts, porticoes, pylons, colonnades, obelisks and avenues. In the shady courtyards were flowers and ornamental waters, including the sacred pool from which water for the lustral washings was taken. In front of the open forecourt was a gateway with two towers (the pylons), dedicated to Isis and Nephthys, the divine midwives who assisted at the rebirth of the Sun God each morning. Behind the open forecourt was a colonnaded hall, and, beyond, a labyrinth of dark chambers containing the furniture for the temple services. Lastly, there was a holy of holies, containing the cultus image of the god. The image was usually of wood, one or two feet high, and adorned with gold and jewels, standing in a shrine fitted with double bronze doors, the opening of which was the first act in the daily ritual. Beneath the image was a boat-like shrine, fitted with poles that it might be carried by the priests in procession. Under the conception of the Sun God voyaging each night through the underworld of death and arising each morning to bring light and life to the earth, all Egyptian ritual gains unity. The darkened sanctuary behind the hall of many columns was the underworld in which the Sun God spent the hours of darkness and death. When the sun had risen

the temple was "like Heaven, while Ra was within it." The priests of a temple of Ra were divided into four watches—the bow, the stern, the starboard and larboard—in token of service aboard the sacred vessel in which the Sun God made his daily voyage across the sky.

Egyptian ritual arose from furnishing the god or goddess with these tokens of wealth and such things as food, drink, music and dance. Practically all Egyptian ritual took place in the open courtyards. The temple proper was not a church for worship, but a store house for the sacred objects and a setting for the priestly processions. These processions were marshalled in the hypostyle hall, the great colonnaded hall before the Holy of Holies. Thence the priests made their way to the open courts. On festal days the people gathered in the forecourt and shared in the distributions of food.

Passing from the general to the particular, an avenue a mile and a half long, with carved rams or sphinxes on either side, connected the temples at Luxor with the temple of the Sun God at Karnak, where the circuit of the sacred enclosure was $2\frac{1}{2}$ miles. (See plan on page 12.) Facing the doorway were two obelisks, each as high as Cleopatra's Needle, and several colossal statues of the kings who built the temple, 20 to 45 feet high. Within the gateway was an open court with twelve great columns to mark the processional path of the priests, and beyond was the Hypostyle Hall with its 134 columns. The central columns are 69 feet high, each equal to the column of Trajan in girth. The difference in height between the columns in the central aisle and those to the right and left, which are only 43 feet high, gave opportunities for very original lighting effects, similar to those from the clerestory of a Gothic church. The 122 columns to right and left supported a flat roof, 33 feet lower than the central aisle. The light filtered through a series of stone slabs 16 feet high and 14 inches thick in which slits were pierced, each slit being 6 feet long and 10 inches wide. The cross lights coming through the grating and breaking upon the rows of columns below must have been sublime in their effect, the awe aroused by the vast dimensions of the hall being increased by the mysterious beauty of the lighting scheme.

Certain Gothic cathedrals were hundreds of years in building, but the making of the temple at Karnak took even longer. The sanctuary was dedicated about 2400 years B.C. and 600 years later it was surrounded by a temple court. Later Thothmes I. added a gateway with pylons, while Thothmes III. built a columnar hall between the pylons. The Hypostyle Hall was commenced by Rameses I. and completed by Rameses II. The temple was finished about 980 B.C. in the time of the twenty-second Dynasty, when the buildings covered a space 1,200 feet long by 350 feet wide, probably the largest building ever put up by man.

And the abiding value of this thousand and more years of effort? Breasted has said (and can it be doubted that his judgment is sound?) :

"He who stands for the first time in the shadow of its overwhelming colonnades—that forest of mighty shafts, the largest ever erected by

human hands—crowned by the swelling capitals of the nave, on each one of which a hundred men may stand together ; he who observes the vast sweep of its aisles, roofed with 100-ton architraves, and knows that its walls would contain the entire cathedral of Notre Dame and leave plenty of room to spare ; he who notes the colossal portal over which once lay a lintel block over 40 feet long and weighing some 150 tons—will be filled with respect for the age which produced this, the largest columned hall ever raised by men."

" Will be filled with respect." None will deny respect to the builders of the temples of the Sun God at Karnak. But those who have been bred in the Greek tradition may yet ask if the main appeal of the Egyptian architect is not rather to the awe which arises from overpowering size and mass than to the joy that comes from a sense of the worth and potency of humanity. As Mr. March Phillipps has said :—The fluting of a Doric column or the slight and invisible swell which modifies its contour, do not add to the actual strength of a column, but they add to its apparent strength and beauty, whereas the lotus-like columns of Egypt fail to suggest power and capacity to bear a weight with ease. An Egyptian column is vastly too big for the burden it carries ; nor are the forms carefully distinguished so that the understanding is satisfied by the evident relation of the parts to the whole.

It is not surprising that Greek intellectuality secured results which escaped the less logical method of the Egyptian. The richer in worth art is, the more profoundly will it portray aspects of emotion and thought. In Hegel's words, the more exalted the rank of an artist, the more profoundly ought he to portray depths which can be sounded only by the direction of his intelligence upon the human spirit and the objective world of nature. Egyptian architects and sculptors failed to master the formal aspects of religious art just because the content of their religion was, in itself, indeterminate. At one time the Egyptian might be a polytheist, at another a monotheist ; or again the determining factor in action might be a vague belief in the efficacy of magic. The absence of ordered logic in his faith necessarily made it difficult or impossible to find the forms which would truly express the divine and bring the idea of God home to human consciousness.

Nevertheless, there are outstanding exceptions ; for example, the cliff temple which Queen Hatshepsut, co-regent of Thothmes III. built in honour of Amon and as a mortuary chapel for herself in the hills west of Thebes. The proportion of the columns and their setting against the yellow cliffs are Greek in their happy perfection. At the time the temple of Der el Bahri was projected " All Egypt was forced to labour with bowed head " for Hatshepsut, as Ineni the architect recorded. Assisted by her favourites, the tutor Senmut and the bronze worker Thutiyy, who wrought the bronze doors at Der el Bahri, Hatshepsut built a terraced court which was to recall the myrrh-decked terraces of Punt, where the Egyptian gods had made their first home. The carved reliefs at Der el Bahri recall the mighty expedition sent to Punt for the myrrh trees, which the Queen planted along the terraces. The photo-

graph of the ruins of Der el Bahri shows the northern colonnade of the middle terrace of the Myrrh Garden of Amon, which rose from the plain about Thebes and reached the cliff of the western hills, where the holy of holies was cut.

During the brief reign of Akh-en-Aten (about 1370 B.C.) there seemed a chance that the more spiritual elements in Egyptian belief would triumph over the careless materialism of the common faith. Akh-en-Aten has been called "the first monotheist, the first individualist, and the first idealist." Be this as it may, the young king sought to give his countrymen a religion of congruous content and coherent form, and the hymns in his ritual stir Christian sympathies :

Thy dawning is lovely in the horizon,
O living Aten, parent of life,
When Thou risest in the east Thou fillest the land with thy beauty.

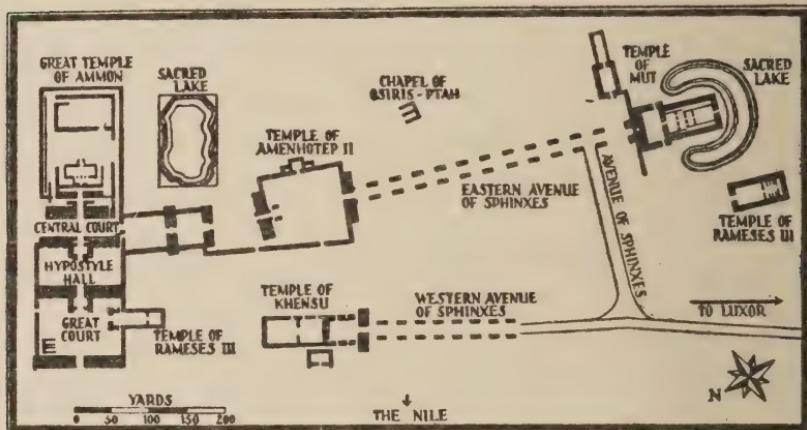
Akh-en-Aten's religion may have had its origin in Asia Minor, the birthplace of so many forms of monotheism. Its basis was the worship of the Sun's disc, Aten being regarded as a personification of the vital and creative power residing in the sun's rays, rather than the solar disc itself. Under the influence of the new faith, the king took the name of "Glory of the Solar Disc," and, leaving Thebes, founded a new capital about 300 miles to the north on a virgin site, "belonging to no god or goddess and to which no man could lay claim." Here the young king, assisted by his architect, Bek, built three temples of red granite, alabaster and brick, in a picturesque style, very different from that of the old regime. One of the temples to Aten was built for the Queen Mother, Ti ; a second for the King's daughter, "The maid-servant of Aten," and the third for the King. In Aten worship blood sacrifices were unknown ; instead the altars were laden with fruits and flowers, cakes and ales ; the temple sculpture attained a happy naturalism, in striking contrast to the convention-ridden forms of earlier temple decoration.

Akh-en-Aten proved a futile dreamer, and when he died his dreams crumbled before the substantive might of the priests of Amon. Akh-en-Aten was succeeded by his sons-in-law, one of whom was Tutankhamen, who abandoned the association with Aten in the royal name, and returned to Thebes to build the famous colonnade in celebration of this counter-reformation. Tutankhamen's inscription at Karnak records :

The temples of the gods fell upon bad times ; their courts were a road for common feet ; the land was given up to the plague ; the gods were neglected. It was then that the King searched for the things which Amon needed. He made the god's image in pure gold and raised monuments to the other gods ; he filled their buildings with slaves and multiplied their estates.

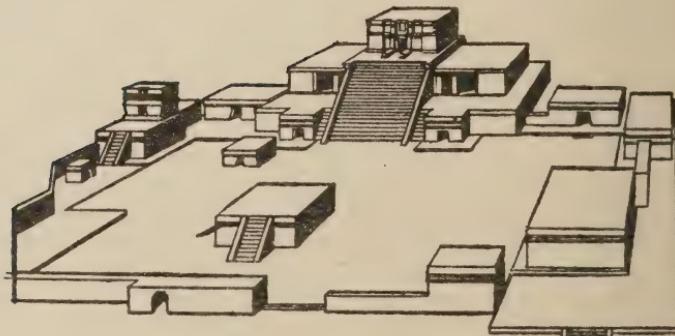
The Egyptian people could understand a king who ruled, but the Athenian's joy in personal liberty was beyond their conception. Caring little for free mental activity, their play of emotion was limited to the physical plane. They were a moral people ; a happy people ; they

had a real appreciation of the mildly graceful and the mildly interesting. But, as a nation, they never possessed that pricking desire to know the inner nature of things which enabled the Greek architect to make a right synthesis of the ideas and materials which go to the making of a House of God. In so far as the Egyptian architects and sculptors succeeded, their temples were the embodiment of thought and emotion which modern values suggest are less than worthy of humanity at its best.



THE TEMPLE AT KARNAK

(see page 9)



MEXICAN PYRAMID TEMPLE

(see page 15)

CHAPTER II

PYRAMID TEMPLES. MAYA OF CENTRAL AMERICA. BABYLONIA

Pyramid architecture, in association with sun worship, scientific irrigation and the political domination of a royal family or priesthood, was not peculiar to the Nile Valley. Indeed, not a little of the interest of Egyptian and Babylonian civilisation arises from the possibility that it was in these river valleys, and, particularly, in the Nile basin that humanity learnt to live in organised agricultural and trading communities, and that here was made the House of God which first expressed the sense of the infinite in human experience. As the makers of the earliest ships, the Egyptians quickly became ocean travellers and were in a position to distribute their culture over the world. Professor Elliot Smith, Dr. Rivers, and Mr. W. J. Perry are the leaders in a school of archæology which regards the cromlechs, pyramids and other big stone tombs or temples in all parts of the oceanic world as evidence of Egyptian influence, being the burial places of Egyptian migrants who intermarried with the princesses of the lands on whose shores they landed. In their opinion these Egyptian migrants brought with them knowledge of irrigation works, mummification, the solar calendar and megalithic architecture and sculpture. Stonehenge, or the megalithic Avenue of Menec in Brittany, may thus have been the Mausoleum or Parthenon of Egyptian traders or explorers who were carrying the worship of the Solar disc throughout the oceanic world, while exploiting the natural products or resources of the countries in which they landed. In some cases the influence was direct, but generally, the planting of the germ of Egyptian culture was secondary, being diffused from such centres as Crete, Syria, or Babylonia, which had previously been in direct contact with Egyptian culture. Thus Mr. Perry has traced a Babylonian element in Southern India and an Indian element, also based upon the Egyptian example, in Siam and Cambodia. Usually the Egyptian culture was quickly debased but, occasionally, it became the foundation of fresh and individual inventions.

In the Mediterreanean, there are early megalithic remains in the larger islands and in many parts of Asia Minor which may have been Egyptian in origin. Thus the megalithic temples of Malta seem to date from about 3000 B.C. When the men of the Bronze Age reached Malta, the Giant's Tower on Gozo or the Mnaidra, the Hagar Kim and Hal-Tarxien in Malta had been buried a full thousand years. They can still be seen, some of the stones being twenty or more feet in length. The purpose of the buildings is in dispute, but the evidence points to some religious purpose. The makers seem to have been a people whose religious rites

included the sacrifice of bulls, pigs and goats. There are big stone altars and hearths for burning. The placing of the burnt offerings in niches in the temple walls for the use of the deity was part of their ritual. At Hal-Tarxien, three temples were found side by side. The first consisted of a double apse, with a corridor in the middle leading to an open space in which stood a dolmen. Great blocks of limestone, 6 feet high, were used, the apses being domed over by layers of masonry consisting of hewn stones. The second temple included three oval enclosures, the largest being 60 feet long, and the smallest about 30 feet. Two corridors connected the chambers, of which two seem to have been reserved for priests. The Tarxien temples have been described by Sir T. Zammit (1930).

The large forecourts where the people could gather on festal occasions have obvious Egyptian analogies; so have the open halls suitable for processional ritual. There is also evidence that the dwellers in Malta and Gozo at the end of the Stone Age consulted oracles. One underground hall—the Hypogeum—was cut so cunningly from the rock, that its walls are highly resonant. The priest who uttered the oracle was seated in an oval pit in the left wall, and must have produced an awe-inspiring effect upon the devotee, an effect which was heightened by the deep gloom of the underground chamber. The number of the shrines in Malta and Gozo, in comparison with the sparseness of the population, may be explained by the suggestion that Malta was a Holy Island in mid-Mediterranean, where mariners came for occasional worship.

Stonehenge, the Avenue of Menec, and the megalithic temples in Malta, have analogies not only in Egypt but all over the oceanic world. In Tahiti, the embalmed body of a chief was buried in a stone pyramid. Megalithic images were set upon stone platforms, with a burial place beneath, in Easter Island, which lies in mid-Pacific, 2,400 miles from the South American coast. Some of the Easter Island statues are 70 feet high and are carved from single blocks of volcanic stone. Three hundred people struggle for a bare living on Easter Island to-day, yet a population numbering tens of thousands seems necessary to account for the megalithic statuary and the vast platforms on which the images stand. It has been suggested that Easter Island was the religious centre of a Pacific Island empire which was overwhelmed by some terrific oceanic catastrophe.

Megalithic architecture of the Egyptian type, accompanied by customs which have Egyptian analogies, also arose on the American continents. In ancient Peru, the mummified corpse of a king or queen was placed in the Temple of the Sun at Cuzco, the Mecca of Peru. On the right were the kings; on the left, the queens, each clad in royal state and seated on a throne of gold. On the western wall of the temple, facing the eastern gate, was a picture of the Sun God, engraved upon a massive gold plate, a human face gazing from innumerable rays of light. The engraved gold plate was so situated that the rays of the morning sun lit up the face of the god at sunrise. Nearby was a temple in honour of the Moon Goddess, mother of the Incas, whose picture

was engraved upon a great plate of burnished silver, and whose shrine was decorated with the silver of moonlight, instead of the gold of the sun god. Lastly, there were the shrines of the other powers of the sky—the stars, the thunder and the rainbow.

The nature worship of Peru recalls the pyramid temples and megalithic memorials of the Maya, a people who suddenly rose to power in Central America about the beginning of the Christian era, flourished for about 600 years, and then disappeared as mysteriously as they had come.

The land of the Maya extended from Tabasco and Chiapas in Southern Mexico through Guatemala and Honduras to Yucatan. In the jungles of British Honduras and Yucatan there are to be found stepped pyramids, imposing stone temples and huge monolithic pillars, inscribed with untranslated hieroglyphics, which Professor Elliot Smith and his school trace to migrant traders or navigators, who had been at some time, directly or indirectly, under the influence of Egypt. Nevertheless, there is much to be said for the view that, face to face with certain problems, primitive societies tended to solve them in a limited number of ways, and it may be that pyramid architecture and megalithic statuary were a natural accompaniment of worship in certain types of primitive communities. No theory has abiding value which is not based firm upon the belief that human thought and human will, impelled by hunger, curiosity, greed, fear and love of the beautiful, must always be the prime factors in moulding human history.

The Maya House of God has an interest of its own, and speculations as to its origin may well give place to an enquiry regarding the analogies or differences it bears to a House of God in other climes and built under other conditions. This is certain. When the architecture and religious art of Ancient Mexico are examined in detail, large divergences from the temple art of Egypt are found. The pyramid in Egypt was a building; in Mexico, it was only a sub-structure upon which the real temple was placed. (See plan on page 12.) The Mexican pyramid-temple resembled the *ziggurat* of Babylonia on its platform of sun-dried bricks rather than the tomb-pyramid of Cheops. In the great temple of Tenochtitlan, destroyed by the Spaniards under Cortez, the pyramid stood at the eastern end of a large court, surrounded by a wall decorated with carvings of snakes. The base of the pyramid measured over 300 feet and was built in five tiers. A flight of 100 steps led to the summit, on the eastern edge of which were two shrines, each of two storeys. It is said that the equinox was calculated by observing the rising of the sun between the two shrines, and in its value for such observation purposes may be found the real significance of the pyramid in Mexican religious art. In front of the shrines was an altar of sacrifice and, in the court below, houses for the priests and such ceremonial buildings as a *tlaxtli* court, where a religious ball game was played, and the *tzompantli*, or frame, on which were set the skulls of the sacrificial victims. The pyramid of Huitzilopochtli had five terraces, the lowest being 360 feet square and the highest 70 feet. It was ascended by a flight of 133 steps; the procession of priests and worshippers, bound

for the chapel on the summit, wound around each terrace in order to reach the top. Cholula was the centre of the worship of Quetzalcoatl, the Prometheus of the Toltecs and the reputed discoverer of maize. He was also the bird-snake god who became the planet Venus. Here the great mound is 1,000 feet square and 200 feet high.

Though the pyramid architecture and megalithic statuary in Central America persisted for over 1,000 years, it quickly reached its prime, the best period being that of the Maya, between the first and the fourth centuries after Christ. Two thousand years ago, and 1,500 years before the Spanish invasion, the low-lying country at the foot of the Mexican plateau and the Cordilleras was one of the most populated districts in the world. To-day, it is swallowed up in the jungle growth of Yucatan, Honduras and Guatemala, and the ruins which testify to the greatness of Maya civilisation are slowly being rediscovered by chewing-gum gatherers, working for the United States markets. Some of the most remarkable existing remains are at Palenque, the latest of the central Maya sites and the place where Mayan sculpture reached its prime. Later in date, but still preserving the characteristics of Maya civilisation, are the temple mounds of Chichen Itza, a settlement which was due to the curious natural wells formed by deep caverns in the limestone floor of Yucatan. A memorable group of religious buildings at Chichen Itza includes the temples with the ball court and the imposing "Castillo," where the temple proper arises upon a pyramid 200 feet high and approached by a flight of 103 steps. It may date from A.D. 1000 or 1100, when Toltec influence from Mexico was strong. For temples of earlier date and definitely Mayan character the extensive ruins at Tikal must be studied. Archæologists owe the greater part of their knowledge to Dr. A. P. Maudslay, who worked among the ruins between 1881 and 1887. Dr. Maudslay's photographs, drawings, "mouldings," and original carvings may be seen at the British Museum and studied with the aid of Mr. T. A. Joyce's admirable handbook, *Mexican Archæology*. The *Temple of the Warriors*, by Earl Morris, is a fascinating record of temple exploration in Yucatan.

Whereas the civilisation of Egypt depended upon an irrigation system derived from the Nile overflow, Maya civilisation was based upon maize. Following a familiar primitive method, the Maya agriculturists burnt the dense forest growth and sowed the maize seed in soil fertilised by the ashes of the burnt vegetation. The bush was cut at the end of the rainy season in January and burned at the end of the dry season in May, the maize being planted in holes. After a crop the field lay fallow and another section of bush land was fertilised and planted. The system was wasteful, as the maize farmer had to wait after each crop until the bush had re-grown before he could use his land again. In the end, it is probable that the bush land became open plain, and it was impossible to grow maize in sufficient quantities to support the population essential for Maya civilisation. Most of the Maya were agriculturists or hunters, living in villages, all traces of which have been lost. What remains are the religious centres where the seasonal festivals and ceremonial rites were celebrated.

Accurate time records were of the same importance to Maya agriculture as they had been to the irrigator in the Nile Valley. As fore-knowledge of the Nile floods was invaluable to the priests of Amun-Ra in Egypt, so their astronomical observations added to the prestige of the Mayan priesthood, and their possession of esoteric knowledge largely accounts for the size and magnificence of their temples. A community does not render its wealth and labour to the king or priests without due reward. The price may seem excessive to other communities with different "values," but it should always be sought. The Mayan people lived in houses of wood and leaves with a gabled roof supported on a ridge pole, as do the peasants of Yucatan to-day, but the temples of the gods and homes of the priests were of stone, the material in Yucatan being a soft limestone. Each temple was built upon a platform of earth and rubble faced with stone and upon this pyramid foundation the temple proper arose. The Maya builders knew nothing of the arch and seldom used the column. Instead, they relied upon massive walls and the "false" arch. When the heavy walls were raised to the desired level, the builders closed the roof by building inwards with overlapping courses until a single slab of stone sufficed to cover the gap. There was no megalithic building in Mexico as in Peru, and the Maya building method proved very wasteful and gave little room inside. Often the room space did not amount to more than a third of the area occupied by the stone and rubble walls. Consequently many Maya temples were little more than two or three shrines under a single roof. In the elaborate Temple of the Sun at Palenque, one of the latest Maya sites, the temple seems to have been built around a small shrine containing a mural tablet picturing two priests worshipping the symbol of the Sun God. The temple included a low entrance stairway, pillars or breaks in the wall leading to a vestibule, and two chambers, one of which contained the shrine with the wall tablet. Surmounting the whole temple was a curious roof crest, which gave additional space for decorative carving and stucco painting. The entablature of a Maya temple was necessarily large owing to the height of the overlapping courses which made up the roof. The facade of the temple was decorated with reliefs of priests, rulers and gods, the whole being gay with paint—red, green, blue, yellow, black and white.

Until the Maya inscriptions have been read the significance of much of the carved symbolism must remain doubtful. But some of the figures have been recognised and their meaning made plain. In Maya ritual considerable importance attached to the cardinal points of the compass. A Maya legend tells that, at the Creation of the world, four beings were placed at the north, south, east and west to support the sky. The divine being holding the "bar," carved on many Maya *stelæ*, seems to be one of these Bacab or Sky-supporters. The "bar" represents a two-headed serpent, bearing representations of the planets, the sun and the moon, and may, therefore, be regarded as a symbol of the sky. The Maya were wont to liken the earth to a monstrous alligator which was said to swallow the sun each night. A monolith found by Maudslay, of which there is a cast in the British Museum, represents this double-

headed earth monster, with the sun god in its jaws at the one end, and the death god within the secondary head, held by the taloned feet of the earth monster. The death god and the ruler of the underworld was represented as a skeleton with skull and crossbones. Another familiar symbol of the powers of Nature was the feathered snake who moves in the great waters, recalling primordial motion and, therefore, the source of life.

Certain aspects of Maya sculpture are not to be attributed to the shortcomings of the sculptors. Thus, the Maya practised head deformation and the ugly features in many of the reliefs are due to this. The flattening of the forehead tends to throw the nose and jaw into unnatural relief. Other effects are due to incongruous ceremonial masks. Thus, the rain god wore a mask recalling a tapir-like creature, the tapir being associated with lightning. Ästhetically, Maya carvings are over-elaborate and the design suffers from the amount of symbolism expressed. But, at their best, Maya reliefs equal those of Egypt and Babylonia in the purity and restraint of their line and the skill with which a highly conventionalised symbolism is expressed. There is no finer example than the triple slab from the Temple of the Sun at Palenque, already mentioned, showing the two priests offering small images to a shield bearing the face of the Sun God, the shield being slung between two stone-headed spears and resting upon a ceremonial base with two grotesque supporters. Among the early Maya there was little or no human sacrifice, the usual offering being incense and animals. Many ceremonial reliefs, however, picture blood offerings, as in the well-known relief in the British Museum, showing a priest, with the sacrificial basket, drawing a rope furnished with thorns through his tongue. In time, human sacrifice became an important element in the worship of the maize goddess. Occasionally, the victim was flayed; at other times decapitated, the feast of the first-fruits of the maize being accompanied by the decapitation of a maiden, representing the spirit of the growing plant, Xilonen. In Aztec times, human sacrifice was a cardinal rite and young men and women were slain on the summits of the temple-pyramids during the spring and autumn festivals.

The civilisation which produced Maya architecture and symbolic sculpture seems to have been fully established at the end of the first century B.C. Later came the settlements at Palenque and Menché. These sites were abandoned about the middle of the fourth century for unexplained reasons, but Maya civilisation lasted on in Northern Yucatan for several centuries. Then it was superseded by the Toltec art, associated with invaders under priest-kings who drove the Maya east and south, borrowing as much of the Maya civilisation as they wanted. The Toltec civilisation gave place to that associated with the domination of the Aztec fighting clan, which ruled the Mexican plateau and neighbouring lands when Cortez conquered the country for Spain in the sixteenth century. Mexican religious art, therefore, had an opportunity for developing for at least 1,500 years, say the time needed to produce the great Gothic cathedrals of Christendom. As a fact there was no Mayan Parthenon or Rheims, and the reason would seem to be that

neither faith nor craft knowledge reached the needful plane of achievement. Maya, Toltec and Aztec religion was even more primitive than that of Egypt, and the belief in magic was general. National wealth was readily diverted into religious channels, but in Mexico, as in Egypt, Nature failed to make men with minds and spirits which would soar. Mexican architects and sculptors, in spite of their energy and technical skill, were unable to give free play to the instincts which make men fully human. The pyramid temples of central America were no nearer to a structure in which God could reveal His nature than the pyramids of Egypt had been.

TEMPLES OF BABYLONIA

Before passing to the religious art of Greece, where full beauty and significance were attained for the first time in religious art, one more ancient civilisation calls for review—that of the Tigris and Euphrates valleys. The architecture of Assyria, and that of Persia which followed, were largely an architecture of fortifications and palaces. Nevertheless, in Babylonia, we can watch a mighty national system expressing itself in brick and stone, so that even the negative evidence is not without significance.

The factors which conditioned the form and significance of the House of God in Babylonia and Assyria were different from, and yet akin to those in ancient Mexico and Egypt. In Babylonia, as in Egypt, there were the wealth-giving streams of the Tigris and the Euphrates, and elaborate irrigation systems, under State control. But the protecting deserts of Egypt were wanting in Babylonia. The "deserts" and highlands on either side of the land watered by the Tigris and Euphrates were never so arid that they did not breed considerable numbers of hardy pastoralists who, from time to time, were tempted to raid the rich settlements in the fertile plains. Unlike Egypt, Mesopotamia was open to ever-changing influences from without, and a never-ceasing stream of traders and fighting men who continually vitalised the experience of every class. In Babylonia, supplies of building stone were wanting, but there was stone in plenty in the Assyrian uplands, particularly a gypseous alabaster which was soft and easily worked by sculptors. City walls, temples, and palaces were made from sun-dried or kiln-baked bricks, and the cheapness and plenty of labour enabled large buildings to be put up in a very short time, the building site of one Assyrian king being frequently forsaken and his temples and palaces allowed to fall to ruins by his successor. In Babylonia and Assyria, accordingly, there were many opportunities for builders and sculptors, and like the Egyptians and Maya they were fond of the pyramidal form. Every important town in Mesopotamia had its *ziggurat*, or staged tower, fashioned from sun-dried bricks, on the top of which was a small shrine or temple. The Babylonian *ziggurat* was not the tomb of an all-powerful monarch as in Egypt, or an observation station for priest-astronomers as was the *teocalli* of Mexico. Rather, it was a representation

of the celestial hill upon which the Babylonian gods were supposed to dwell, crowned by the temple in which a god was supposed to lodge when he came to earth for the service of humanity. The *ziggurat* was a God's House, built by hillmen who had come into the flats of Babylonia and desired to worship the gods of the mountains after the manner of their forefathers. The "Link between Earth and Heaven," "The House of the Mountain" and "The Holy Hill" were among the names which the people of Mesopotamia gave to the *ziggurat*. It remains to connect so significant a building with the people and circumstances which brought it into being.

First, let us summarise the growth of the religious idea itself, remembering that the changing faiths of four or more thousand years are being summarised in a few hundred words. Everywhere, curiosity and a vague terror led to the formulation of the earliest religious belief. In Babylonia, there was first the worship of the Earth Mother, which gradually gave way to the worship of the supreme Sun God. There were also numberless tribal or communal gods and goddesses. Very early the worship of the Earth Mother was associated with Tiamat, the dragon of the watery chaos, as was natural in the mud lagoons of the river valleys. In the days before time was, the gods were created, with Father Anu (the sky) at their head, and it fell to Merodach (Marduk), "the glory of the sun," to vanquish the dragon of chaos. Before he set out, Merodach was armed with spear, bow and arrow, and filled his body with the darting flames of the lightning. He placed the Four Winds, so that the Demon should not escape, and in the end Tiamat was caught in the net of Merodach and slain. Her body—the great waste or chaos of waters—was divided, one part being made into a covering for the heavens—"the waters above the firmament"—the other remaining on earth—"the waters under the firmament." Merodach then ordered the world anew, and with the goddess, Aruru, was the creator of the world. Man was created from potter's clay and animated by the blood of an earlier race which had perished in the Flood. The primitive kings were regarded as descendants of men who had escaped the Flood and who restored the earth to fertility by their control of sunshine, rain, and the natural powers making for growth in the fields. But, allied with these beliefs generated in the marshlands of Mesopotamia, was the recollection that their forefathers had been hillmen. The problem of the religious architect in Babylonia was to link Earth with Heaven, and he achieved his end by the device of the *ziggurat*, which was, moreover, a natural building form in a land which was periodically flooded when the snows of the Armenian highlands melted in spring.

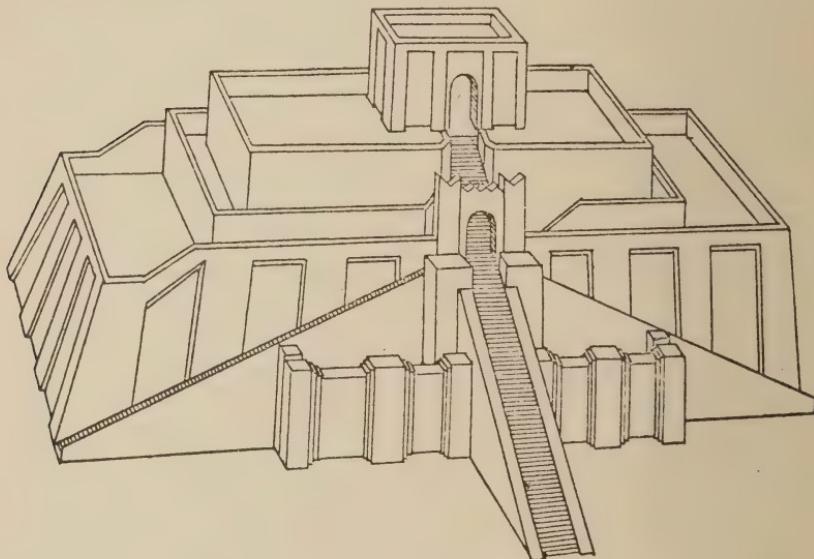
As the *ziggurat* differs essentially from the pyramid tomb, so there is a deep-rooted difference between the Babylonian and the Egyptian idea of life after death. Compared with the sunny optimism of the Egyptians, Babylonian belief was harsh and cruel. The Babylonians disbelieved in a resurrection of the body, or a spiritual life after death. "When the gods made man," said Sabitu to Gilmanesh, the Babylonian Noah, "they made him mortal; life they kept for themselves." In Babylonia, men believed that the dead passed to the underworld

and stayed there in an unbroken sleep. All their prayers were for long life. "Make my years to endure like the bricks of Ibarra, prolong them into eternity." So ran a prayer of Nebuchadnezzar. Again and again Babylonian mythology insists that all riches go and all strength fails when man comes of the Gate of Death, the most haunting embodiment of the belief being the story of Ishtar's descent into Hell. Perhaps this harsh faith was one reason why the Babylonians tended to utilise architecture and sculpture to celebrate the aims and ideas of alien warrior castes—Semites, Assyrians, Medes or Persians. The necessity for guarding the rich trading centres of the Euphrates valley by an offensive, rather than a defensive, foreign policy forced Babylon to accept the domination of these warlike invaders, and these conquerors controlled the building fund. The House of the Mountain of All Lands, which joined earth and heaven, however, was religious architecture beyond a doubt, and is the characteristic House of God in the Tigris and Euphrates valleys.

One of the earliest settlements in Mesopotamia was Ur, the first home of the patriarch, Abraham. The town lies on the right bank of the Euphrates, about 125 miles from the present head of the Persian Gulf. The mound which covers the ruins of Ur has been excavated by a joint expedition organised by the British Museum and the Museum of the University of Pennsylvania, and the result has been to disclose a brick structure 210 feet by 140 at the base and rising in four stages to the topmost level, on which stood the shrine of the Moon God. At the base an enclosure has been traced, 400 yards by 200, within which were found the principal buildings of the town. But, dominating all, was the four-storied tower, faced with kiln-baked brick set in bitumen, and crowned by its blue shrine. Mr. C. Leonard Woolley has described the excavations in detail and his books include a reconstruction of the *ziggurat* made by Messrs. F. G. Newton and W. Walcot. The lower stages of the temple tower were built by King Ur-Engur and his son, and were completed about 2250 B.C. The *ziggurat* walls still rise 60 feet from the ground on three sides, and even higher on the fourth side, where can be traced the three flights of steps which led to the first stage. Each flight had 100 steps, one being in the centre and the others at the corners of the principal facade, the three converging at a broad gateway, which leads through the parapet of the second stage. When Abraham lived at Ur there were only two stages to the temple tower: 1,750 years after Ur-Engur, other stages were added, and the shrine at the top was coated with blue-glaze bricks, so that it vied with the azure sheen of the Mesopotamian sky as it gleamed in the sunshine 150 feet or more above the level of the plain. A courtyard paved with brick and asphalt stretched at the base, with a white colonnaded wall. From this rose the temple tower, the lower part being painted black, in sharp contrast with the white of the colonnade. Above the black parapet was a terrace bright with red plaster, and, at the summit, the shrine of sky-blue glazed brick, in honour of the patron deities of Ur.

The *ziggurat* shrine was not the only House of God in Ur. At the foot of the temple-tower was a small temple in front of which stood a golden

statue of a god, put up by order of King Nebuchadnezzar. Earlier, there had been a five-roomed sanctuary dedicated to the Moon God, which was hidden away behind the priests' house and approached only by a winding passage. Nebuchadnezzar's reforms did away with the five-roomed sanctuary and substituted a public court, from which the townsfolk could see the statue of Nannar. A change of deep significance this. Hitherto the gods of Babylonia had been placated in the seclusion of their sanctuaries. Now the King allowed them to become objects of public worship, so that the people of Ur might have their part in a ritual which had hitherto been conducted by the priests of the Moon



THE ZIGGURAT, UR

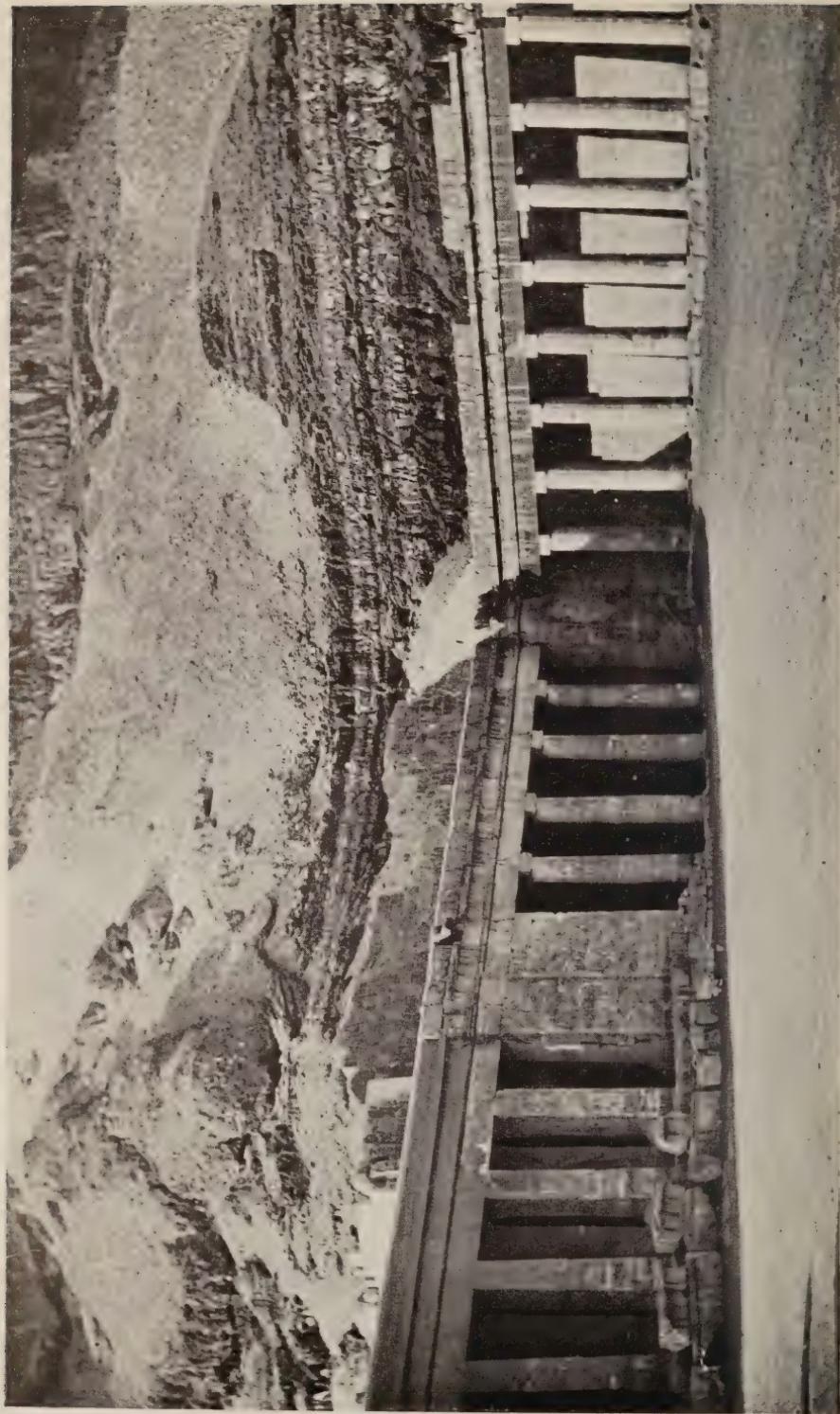
God in secret. When they heard the sound of the sackbut, the people fell down and worshipped, as we read in the Book of Daniel. If this element of public worship had been general throughout Babylonian history, the evolution of the House of God would have been very different.

At Ur, the temple-tower had four stages, but the number varied, though always the idea of the builder was to symbolize the sacred hill which linked earth and heaven. At Nippur, a temple and *ziggurat* were excavated by an expedition from the University of Pennsylvania, under Professor Hilprecht, who found that a House of God had existed on the site for 4,000 years. Here the temple-tower had five stages and was topped by a shrine dedicated to the god, Bel. It was encased with burnt bricks and decorated with panels and buttresses, and rose from a brick-paved court. In the north-east side of the court was found a store-house for offerings, "the House of Honey, Cream and Wine," and nearby the dwelling of Bel, where the offerings were made. With the House of Bel were shrines of twenty-four other gods of the Babylonian

A. Beato
(see page 9)

FORECOURT OF THE TEMPLE OF AMENHOTEP III, LUXOR



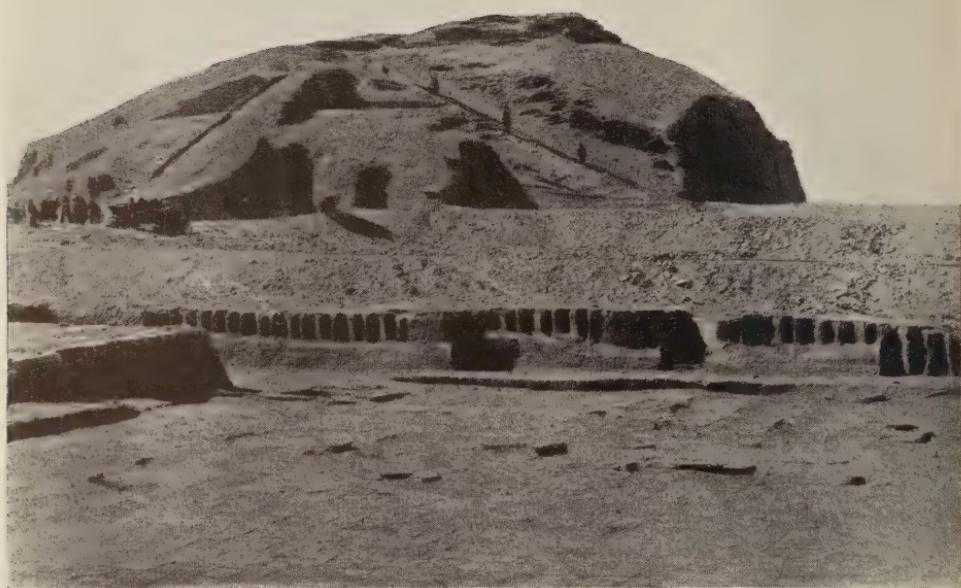


THE TEMPLE OF HATSHEPSUT, DER-EL-BAHRI

(see page 16)

THE 'CASTILLO' AT CHICHEN ITZA





THE ZIGGURAT AT UR

(see page 24)

pantheon. Most famous among the *ziggurats* of Mesopotamia was that of the war god, Marduk, at Babylon, approached by the Via Sacra of Nebuchadnezzar, from the great double gate of Ishtar, with its decoration of alternate bulls and dragons. Along the walls of the Via Sacra, which was paved with white and red stones, was a procession of lions in relief and covered with enamel, recalling the processional way at Karnak.

A detailed account of Babylonian history would be necessary to account fully for the change from the secret ritual of magic to the public worship of national gods. But the political factors which gave the temple architecture of Babylonia and Assyria their final form can be suggested briefly. The deserts surrounding Mesopotamia were not arid, though they supported relatively small populations. It was, therefore, easy for armies to reach the rich valleys, and Mesopotamia never enjoyed the security which the deserts had given to Egypt.

About 2750 B.C., Sargon united the Semites and established an Empire which extended from the Persian Gulf to the Mediterranean. In the course of the following centuries the power of Egypt grew, and Babylonia was also threatened with invasion by the rising Hittite power in Northern Syria. Assur and Nineveh were founded to meet the danger, and these colonies grew in strength until they were able to claim a separate national existence. Later, the danger of Hittite and Egyptian invasion led Babylon to submit itself entirely to Assyrian rule. The history of Assyria cannot be separated from that of Babylon. The Assyrians were the military caste ; the Babylonians the trading caste. The interests of the two are continually clashing, but their efforts form a connected history. Babylonia provided the wealth and probably the engineering science and craft which went to the making of the *ziggurats* and the temple carvings of Mesopotamia, but the thought was that of the greedy war-makers, the Assyrians.

Throughout the second millennium B.C. Egypt pursued a vigorous policy of conquest. Thothmes III. (1481-1448 B.C.) conquered the greater part of Syria and fought his way to the banks of the Euphrates. Rameses II. (1292-1225 B.C.) inflicted a signal defeat upon the Hittites. Babylonia would have had to submit to one or other of these enemies had it not been for the energy of the Assyrian monarchs. These kings marched continually through the country to the West, demanding tribute and reducing such a people as the Jews to the position of subject races. The prophet Habakkuk described them :

"For lo, I raise up the Chaldeans, that bitter and hasty nation, which shall march through the breadth of the land, to possess the dwelling places that are not theirs. They are terrible and dreadful. Their horses also are swifter than the leopards and are more fierce than the evening wolves, and their horsemen bear themselves proudly ; yea, they come from far."

Most famous of the early Assyrian conquerors was Tiglath-Pileser I., who reigned from 1125 to 1105 B.C. The records proclaim him conqueror from the Great Sea of the West Land (the Mediterranean)

to the Sea of the Nairi Land (the Lake of Van in Armenia). On his death, the Assyrian power waned until the accession of Assur-nasir-pal III. (884-860), whose rule was recognised through Syria, even Tyre and Sidon paying tribute in order to secure the safety of their towns. The usurper, Tiglath-Pileser III. (745-727 B.C.) incorporated the greater part of Syria in his kingdom. Finally, Assyria reached the zenith of its power under Sargon, Sennacherib, Esarhaddon, and Assur-bani-pal (668-626 B.C.), who was powerful enough to send an army through Syria and Egypt, which despoiled Thebes.

All were great builders. A memorial of Esarhaddon boasts of building thirty-six cities and ten palaces. Very characteristic is Sargon's palace at Khorsabad, from which the colossal man-headed bulls in the British Museum were excavated.

Khorsabad was the site of a town built by King Sargon (722 to 705 B.C.) a few miles out of Nineveh, the Assyrian equivalent of Fontainebleau or Versailles. Sargon intended to set up a city which would be identified with the glory of his kingship—the stimulus which also pricked Louis of France to the building of Versailles. Sargon's royal house covered 25 acres and lay in a corner of the town, half being within the walls and half without. The buildings were set upon a platform constructed from sun-dried bricks, which rose 46 feet above the level of the plain, 46 feet being the height of the town wall across which the palace lay. The palace buildings were also of brick and formed a huge single-storied erection ; but towering above the rest was the sacred *ziggurat*. As at Ur, the *ziggurat* was a pyramidal structure of sun-dried bricks, faced with burnt or enamelled brick, and built up in successive stages, with a platform at the top, upon which was placed a small shrine. In this case there seem to have been seven stages, dedicated respectively to the sun, the moon, and the five planets known to the Babylonians, each being distinguished by its colour. The lowest, dedicated to Saturn, was coloured black ; the second to Jupiter, orange ; the third to Mars, red ; the fourth to the Sun, golden ; the fifth to Venus, pale yellow ; the sixth to Mercury, azure blue. The shrine on the summit, dedicated to the Moon, was probably coated with plates of silver. A decorated parapet encircled each platform of the *ziggurat* and wound up to the top of the tower, adding richness to the otherwise geometrical design. Indeed, the whole of the great brick palace, rising 60 or 70 feet above the plain, was almost bare of ornament, save for the decorated battlements. The command in Deuteronomy xxii, 8, will be remembered :

“ When thou buildest a new house, then thou shalt make a battlement for thy roof, that thou bring not blood upon thine house, if any man fall thence.”

The temple-tower was a prominent object in the lay-out of an Assyrian or Babylonian city, but it was no more characteristic of the spirit animating the structural whole than was the private chapel of Louis XIV. at Versailles. In Egypt, the temples and their decoration were a prime care of the King and Court, but, in Babylonia, the House of God was a side issue. In Babylonia, as in Egypt, there was labour in plenty

for these great building operations, the workers being prisoners of war, but their work was employed for the glorification of warrior kings and was not under the direction of a priesthood, as in Egypt.

One can judge why the temple architecture of Babylonia was, relatively, of small importance when we picture the contrary operation —the building of a great Assyrian palace, with its central courtyard, perhaps 2½ acres in extent and its hundreds, even thousands, of store-rooms, corridors and halls. All the larger halls were decorated with the familiar stone reliefs and the colossal man-headed bulls, two flanking each doorway. The bull was the first sign of the Babylonian zodiac and marked the beginning of the solar year, hence its significance to a military caste of sun-worshippers. Twenty-six pairs of these colossal man-headed bulls were found in the palace of Khorsabad. At one spot, a vista of eight doorways, each with its attendant bulls, could be seen. Six of these stone monsters decorated the central gate with its domed arch and overhanging decoration of coloured tiles.

Some of these bulls weigh 40 tons, so the task of bringing them from the quarries must have been heavy. Two marble slabs from Sennacherib's palace at Nineveh (now in the British Museum) show how the Babylonian architects handled them. After being roughly carved at the quarries, the statue was floated on barges to the foot of the vast platform upon which the palace arose. Three hundred men or more were attached to the towing ropes. Then came an even harder task, dragging the statue to the top of the mound. The reliefs depict the overseers, with their rattans, urging the unfortunate labourers to exert all their power. Some of them are naked ; others wear short chequered tunics. Before the statue was placed in position the sculptors completed the carving. Doubtless the rattans of the overseers were as active while the sculptors were at work as they had been while the labourers were dragging the statue to the foot of the mound. In the last stage, the colossal bull was laid on its side upon a large sled and, with the aid of wooden rollers and a huge lever, hoisted on to the platform and into position. The relief at Nineveh pictures the scene. Four overseers stand upon the hill, directing the operation. One has charge of the gang which picks up the wooden rollers upon which the colossus moves ; under his instructions, the men bring the rollers to the front again when the statue has passed. Another shouts orders to the men who manipulate the great wooden lever and move the wedges which form its fulcrum. The lever raises the statue from time to time and so helps it over the rougher ground. The third overseer, with a speaking trumpet, repeats these orders. A fourth claps his hands to secure a continuously rhythmic effort from the hundreds of labourers. Doubtless a rude chant was sung by the workers as they dragged the great statues into their place after the manner of the Venetian pile-drivers to-day.

Of the significance of one of these stone colossi according to modern values, Dante Gabriel Rossetti has sung in his " Burden of Nineveh." The poet had been lingering

" O'er the prize
Dead Greece vouchsafes to living eyes,"

and was turning once more towards the noisy city, when he found his passage stopped by a party of workmen hoisting in the winged beast.

“A human face the creature wore,
And hoofs behind and hoofs before,
And flanks with dark runes fretted o'er.
‘Twas bull, ‘twas mitred Minotaur,
A dead disembowelled mystery.”

As Rossetti gazed there came the knowledge that this “mummy of a buried faith” did not answer to what was most worthy in Christian experience and then, quick, the haunting fear that factors in modern civilisation might again make the winged beast a fit embodiment of the values accepted by Western Europe to-day.

“Or it may chance indeed that when
Man's age is hoary among men—
His centuries three-score and ten,—
His furthest childhood shall seem then
More clear than later times may be :
Who, finding in this desert place
This form, shall hold us for some race
That walked not in Christ's lowly ways,
But bowed its pride and vowed its praise
Unto the God of Nineveh.”

Nebuchadnezzar's golden statue in the temple court at Ur has suggested that, by 500 B.C., the Babylonians had reached conceptions of the Godhead which might have given rise to a House of God different in character from the earlier brick shrines or the *ziggurats* in their casings of coloured tiles. This is a prayer of Nebuchadnezzar :

“O eternal ruler, Lord of the Universe, grant that the name of the King whom thou lovest, whose name thou hast proclaimed, flourish as may be pleasing to thee. Lead him in the right path. I am the prince who is subservient to thee, the creature of thy hand. Thou hast created me, and thou hast entrusted the rule of mankind to me. According to thy mercy, O Lord, which thou bestowest upon all, may thy supreme rulership be merciful. The fear of the divinity implant in my heart. Grant me what may seem good to thee, for thou art the one who has granted me life.”

Before the faith suggested by this prayer and by Nebuchadnezzar's order that the statue of the Moon God at Ur should be worshipped in public found expression in architecture, Assyrian power ended. Cyrus of Persia captured Babylon in 538, and in 525 B.C. Cambyses led a Babylonian army once more into Egypt. Darius and Xerxes extended their dominions to the borders of Greece, and the Persian Empire was not overthrown until Alexander the Great's campaign in 331 B.C.

The Persians were a race of hardy mountaineers until the time of Cyrus, living in small communities and knowing little of art until conquest made them familiar with the luxurious court life of Babylonia.

Having no architecture of their own, they copied freely. Persian sun-worship did not necessitate large temples, and all that matters to the student of architecture is the eclectic style, based upon Babylonian, Egyptian and Greek elements, to be found in the palaces of Darius and Xerxes at Persepolis and Susa. From Babylo-Assyria the Persian builders borrowed the habit of building in brick, the elevation of their buildings upon lofty platforms and the gateways flanked by colossal man-headed bulls. From Egypt, they borrowed the great columnar hall, such as the Hall of Xerxes at Susa. As the superstructure in a Persian building was of wood, a wider spacing was allowed between the columns than in Egyptian temples, and the columns were more slender.

At Persepolis, the royal city was raised upon a platform, 1,580 feet by 850 feet, and 30 or 40 feet above the level of the plain, the platform being cut from the base of a mountain and levelled into a series of terraces, approached by a great double stairway of black marble. At the top was a gateway adorned with monster man-headed bulls. Within the gateway was a second terrace, with the great columnar Hall of Xerxes. Other terraces with numerous courts and halls were cut from the mountain side behind the main platform. On the roofs of some of these buildings a talar or prayer platform was built, as pictured in the tomb of Darius, cut in the rocks behind Persepolis.

There was a sense of colour and mass and exquisite craftsmanship in the work of the Persian builders. Almost 1,000 years after Darius and Xerxes, there was a revival of Persian power under the Sasanian kings (A.D. 226-651), and the palace of Khosroes at Ktesiphon on the Tigris shows work of interest in connection with the development of the arch and the dome, but little was added of definitely religious interest. It was the strength and weakness of all the architecture based upon the wealth of the river-valleys that it was essentially a courtly art. While the Frenchmen mirrored in their art the feminine graces and vivacity of Versailles in the eighteenth century, the purpose of the Babylonian was to extol the virile qualities of his conquerors and enforce the impression of the immovable strength of an all-powerful monarchy.

As in Egypt and Mexico, the ideas and ideals required for a House of God of full significance and worth were not present. The architecture of Babylonia, whether Assyrians or Persians controlled the art fund, has the message of unthinking and unfeeling power which speaks through the man-headed bull of Khorsabad. The might of a Babylonian conqueror lay in his mercenary army and the ingenuity of his tax gatherers, and these factors did not give any special opportunity to the designers and decorators of temples. There were in the Babylonian empire religious ideas of sublime potentiality, but they found expression in the poetry of subject races, such as the Jews, not in the temples and temple statuary of the conquering kings. What might have developed from the religious ideas to be traced about the time of Nebuchadnezzar, can only be guessed. In general, Babylonian religious art tells of a physical and mental servitude as persistent as that of Egypt, and the emotion aroused is the cruel tyranny of mass.

CHAPTER III

THE LEGACY OF GREECE. THE ARCHITECTURE OF PAGANISM

In wondrous contrast to the House of God in ancient Mexico, Babylonia or Egypt were the temples and temple statuary of Greece.

“ Let there be Light, said Liberty,
And, like sunrise from the sea,
Athens arose.”

So whispered Shelley, and it is to Athens, as the first-born of Light and Liberty, that we come for an example of what a House of God may be when built by free men of full insight. Every city-state added something to the fund of intellectual and emotional experience upon which the Greek architects drew for inspiration. But Athens absorbed what was best in the energies generated in the Greek world, and among the Athenians we can best trace how those energies found expression in religious thought and architecture.

Demosthenes, speaking of the time of Salamis, said that the Athenian considered he was not born to his father and mother alone, but also to his country. “ Such a man would sooner perish than behold her in slavery, and will regard the insults and indignities which must be borne in a Commonwealth enslaved as more terrible than death.” These times of stress, and still more the triumphal years that followed the war with Persia, gave to the life of Athens the balance of a work of art.

Such divine self-confidence has been the dower of few peoples. It belonged to the Florentines for a few years when Lorenzo dei Medici ruled. The Venetians had it for a while. It was given to the Dutch burghers in the years that followed the defeat of Spain. In those years Rembrandt was born. In England, the age of Shakespeare gave men a similar belief in their powers and the rightness of their national outlook. So it was with Athens in the years following the Persian war. Marathon and the brilliant sea fight at Salamis made Athens the first city in the Greek world. The small states in her vicinity and the Greek trading cities of Asia Minor joined a confederation in which Athens was the leading spirit. Even those who refrained from an alliance could not withhold their admiration from the city which had done so much to save the Greek world from the hordes of Darius and Xerxes.

The Athenians only attained their proud position at the cost of their capital town. Athens stood on a sandstone plain surrounded by low hills, among them, the marble mountains of Pentelicus and Hymettus. In the plain were several limestone crags. One of these, the Acropolis, served as a place of refuge to neighbouring agriculturists and fishermen

in times of danger. Around the Acropolis, four miles from the sea, and therefore safe from piratical raids, Athens arose. Later the Acropolis became a sacred citadel, like Zion at Jerusalem or the Capitoline Hill at Rome. Here was the temple of Athene Parthenos, the tribal goddess. Xerxes sacked Athens and burnt the sacred buildings on the Acropolis during the campaign of 480 B.C. When peace was assured the Athenians set to work to rebuild their city. The harbour of the Piræus was reconstructed and connected by the Long Walls with Athens itself. Cimon built the wall on the south and east of the Acropolis, and so provided a broad platform on which the new temples were to be built.

The work was carried on by Cimon's successors. Between 447 and 431 B.C. about £5,000,000 was spent upon public memorials in Athens, a sum comparable with the 5,000,000 talents spent upon naval and military expeditions in the Peloponnesian War between 433 and 426 B.C. Here are the chief items of art expenditure according to Zimmern :—

			talents	£
Parthenon	..	..	700	840,000
Statue of Athena	..	..	1,000	1,200,000
Propylæa	..	..	400	480,000
Two Victories (gold)	..	..	200	240,000
Other statues and shrines	..	..	2,700	3,200,000

Only a nation of artists would have permitted its art fund to approximate to the expenditure upon defence in time of war, but the Athenians were in no doubt regarding the rightness of the policy, even from the standpoint of imperial politics. It seemed a paying policy to build a marble temple to Athena ; plain stone would not serve for the central shrine of the city-state which sought the hegemony of the Greek world.

The people of Athens rebuilt the temples on the Acropolis ; not this man or that. If any single man can claim the chief share of the glory, it is Pericles. He divined that the proud boast of the Athenians, "we love the beautiful without extravagance, and knowledge without exaggeration," was incompatible with strivings after a wide-flung empire. To engage the Athenian imagination and draw it from the road which eventually led to ruin, Pericles determined to build a series of public buildings and memorials which should witness to the glory of the first city in Greece. In carrying through the scheme, he never allowed the enthusiasm of his countrymen to wane. Pericles it was who, about 455 B.C., issued a call to all Hellenes, wheresoever they lived, in Europe or Asia, to send delegates to Athens to confer regarding the rebuilding of the shrines which the Persians had burnt. The decree added, as though it was a secondary consideration, that the conference should also consider the question of maintaining the freedom of the high seas. Naturally, the other states of Greece paid no heed to the proclamation. They were fully aware that to Athens would fall the major part of the credit in any joint scheme. Foiled in this direction, the Athenians credited the art fund with one-sixtieth part of the tribute paid by her subject islands and colonies. When the war with Persia ceased the tribute monies were combined with the art fund, and the

whole was used indiscriminately for temple building or defence. About 440 B.C. the building of the Parthenon was actually interrupted by the revolt of Samos, which necessitated drawing upon the building fund, though even then money was still taken for the gold and ivory statue of Athena which Phidias was making. Thucydides estimated that at one time the accumulations in the Treasury of Athena totalled 9,700,000 talents (about £11,000,000). Mr. Zimmern's chapter upon the public economics of Periclean Athens is full of interest for the student of religious art. The details may seem sordid, but, as Dean Inge has said, "When values are in question, by their fruits, and not by their roots, we shall know them." In the case of Periclean Athens, its triumphant beauty is its own justification; that, and the inspiration it has been, and will be, to succeeding races of men.

Climb the marble stairway leading to the summit of the Acropolis and see the place as it was at the close of the fifth century B.C. The great entrance, the Propylæa, was built between 436 and 431 B.C. The combination of the white marble from Mount Pentelicus and a dark limestone from Eleusis is a daring innovation. The sturdy Doric columns, too, have been gracefully combined by the architect, Mnesicles, with the lighter Ionic form. In the centre is a portico of six Doric columns, flanked by projecting wings to right and left, each with its own Doric portico. Behind is a vestibule divided into three parts by Ionic columns, contrasting happily with the heavier Doric columns without. Hard by, on a projecting terrace to the right, is the little temple dedicated to the Wingless Victory, built by Callicrates, who assisted Ictinus in building the Parthenon. It is a single *cella* standing upon a low platform, with four columns forming a portico in front and four behind, but the perfection of craft and the grace of the decoration make the tiny temple memorable among things of beauty. The terrace is surrounded for safety with a breast-high parapet carved with sculptured reliefs, among them the lovely Victory adjusting her sandal, a figure brimful of light and liberty. The Temple of the Wingless Victory dates from between 450 and 430 B.C.

Passing through the central hall of the Propylæa, pause a moment before the bronze lioness set up in honour of Leæna, the courtesan. The woman was an associate of Harmodius and Aristogiton, the democratic rebels. Though being tortured to death, Leæna refused to disclose her knowledge of the plot. The Athenians kept her in memory by this tongueless lioness in the Propylæa. Leaving the great entrance, we come out upon the Acropolis hill, where the colossal bronze statue of Athena by Phidias meets the gaze. Dedicated from a tithe of the spoils of Marathon, it may have been set up by Cimon in memory of his father Miltiades, the hero of Marathon. The Lemnian Athena, also by Phidias, stands near by. Beyond is the Parthenon, the temple of the Virgin goddess, built from the golden-hued marble of Mount Pentelicus. The principal chamber of the temple, the *naos* or *cella*, in which stands the chryselephantine statue of Athene Parthenos, is surrounded by a colonnade of the stately Doric pillars, the exterior of the *cella* being decorated with a frieze in low relief. The metopes, or

square panels above the colonnade, are carved in high relief. The triangular pediments above the eastern and western porticoes are filled with two marble groups, carved in the round ; the one picturing the birth of Athena, the other, the encounter between Athena and the sea god Poseidon. On the metopes are scenes recalling the victories of the Athenian spirit in its conflicts with the barbarians, while the frieze depicts the Pan-Athenaic procession to the shrine of the goddess, culminating in the group of the gods who witness the presentation of the sacred robe at the shrine of Athena.

This is not sculpture as we know it in the Luxembourg or the Tate galleries. The frieze of the Parthenon is a religious rite, "the thing done," which has taken a marble, rather than a human, form. Centuries earlier, a wooden image of Athena stood in the temple of the tribal goddess on the Acropolis. This the townsfolk decked with a new robe, woven by the girls of Athens during the July festival, when the need for rain was greatest. The robe was a luck-bringer, and by carrying their gift in solemn procession to her shrine the Athenians ensured their state against the ill-will of the goddess. At first the rite was performed at any time of need ; then each year and, at last, the presentation of the *peplos* was associated with the Pan-Athenaic games, which were held every four years, and witnessed to the solidarity of the people of Attica. Thus the sculptured frieze became a summary of Athenian life. At the west end of the Parthenon are the youths with their horses, who divide into two parties, the one going by the north side of the *cella*, the other by the south. The sacrificial beasts ; men carrying olive branches and women bearing water vessels ; chariots, each with its marshal and armed soldier ; magistrates, ambassadors and knights ; all are there.

The frieze above the colonnade of the Parthenon was not mere decoration. It was an integral part of the House of the Virgin Goddess of Attica, as was the statue of Athena itself. The statue was of gold and ivory and stood, 40 feet high, within the windowless *cella*, lighted by the soft glow which filtered through the thin tiles of marble in the roof. Phidias, the sculptor, employed gold for the dress which fell in heavy folds to the ground—using ivory for the face, neck, arms and feet, as well as for the Gorgon's mask on the breast of the goddess. On Athena's head was a helmet with triple crest. In her right hand she bore a figure of Victory, 6 feet in height. At her left side was a shield with carved reliefs. If the frieze is a choral ode, the statue of Phidias is a pæan in gold, ivory and jewels, destined to cry the honour of Athena to the world when the voice of every Greek who fought at Marathon or Salamis had long been hushed. Apart from the actual stonework, bronze screens were fixed between the external columns, preventing public entry into the shrine and yet allowing the treasure or the statue of the goddess in the interior to be seen when the bronze doors were open. In most temples the lighting of the interior seems to have been by the doorway. In the Parthenon, this was 16 feet wide and 33 feet high, ample to light the 100 feet building with sunlight so bright as it is in Greece. A system of lighting by an open skylight in the roof

was impracticable where there was a statue of wood, ivory and gold, which would have been ruined by damp or heat. The interior ceiling was of wood, painted and gilded, and the floor was of marble. The long eastern chamber contained a double row of columns, surmounted by an architrave, above which was a second row of columns supporting the roof. In front of the columns at the western end of the chamber was the statue of Athene Parthenos, facing the eastern entrance with its bronze screen. The small western chamber was square, its roof being supported by a column at each corner.

Truly the house of a goddess, and none the less so because this temple of Athena was no austere shrine set upon the summit of a rugged rock, classically cold as crystalline white marble could make it. There was a time when such a view was tenable. During the last 50 years, however, evidence has accumulated that the Greeks coloured their buildings and their marble statues. Traces of red pigment were found on the mantle of Apollo in the western pediment of the temple of Zeus, at Olympia. In one of the metopes, Hercules and the Cretan bull, the hair of the hero was found to be red and the body of the bull brown, and the whole group stood out against a background of blue. The broader masses of a Greek temple, such as the columns and architraves, were the tones of the original marble, but ultramarine and vermillion were used generously on the smaller detail, the figures of the frieze standing out from a background of blue, the flesh being a dun tone and the drapery and armour coloured. There can be no doubt that the Greeks constantly relied upon colour to give the marble of their buildings an even deeper beauty than we can realise from the uncoloured fragments that remain. And why not? Surely it would have been strange if the Greek genius had excluded the due use of colour—colour which Meredith called “the soul’s bridegroom, which makes the House of Heaven splendid for the bride.”

Such was the Acropolis. Even to-day, standing among its ruined temples, men cease to wonder that, for a while, the individual Athenian was willing to sacrifice many an ambition and liberty which modern men deem all-important. Looking up to the temples on the Acropolis, he could believe the gods had indeed come to earth. In his pride he forgot the self within him; he was an Athenian in very deed. The broken columns still sing the emotions of the men who put them up. The perfect proportions witness to a harmony which their builders found in this fifty years of Athenian life, a harmony which included the wild beauty of forest, hillside and sea, as well as the beauty of the human mind. The Parthenon, as the shrine of the Virgin Protector of his city, satisfied every emotional, philosophic, and æsthetic craving of the Athenian. When his gaze rested upon the temples which crowned the low hill, he could forget the perpetual sacrifice of personal liberty and will, and say with all sincerity, “it is worth while.”

It has been said that the Parthenon was nothing more than a highly idealised expression of the pile-house of the early European lake dwellers, the piles representing the columns, and the cross-beams and their support the architrave above. Even if this be more than a fancy, it

is more fruitful to trace the gradual refinements upon the primitive stone temple which resulted in the graces of the Doric and Ionic orders.

Nothing could be simpler in origin than a Greek temple. An early form was a small rectangular hall—the *naos* or *cella*—with a porch supported by two columns in front. Later a similar porch, also with two columns, was added at the opposite end. The lowest courses of the *cella* wall were of stone, the remainder being of clay bricks, each wall being protected at the ends by upright beams, which developed into the pilaster-like *antæ* of the Doric temple. The *cella* within was divided into two unequal parts by a cross wall, the eastern part being long and the western part short. In course of time a frieze of carved *metopes* and *triglyphs* was added to the side walls of the *cella*. It has been suggested that the *triglyphs* represent the ends of the roofing beams and the *metopes* (the carved panels between the *triglyphs*) represent the spaces between the beams. An alternative suggestion is that the *triglyphs* and *metopes* arose from a colonnade of wooden posts which was put up around the *cella* to support roof beams which rested between an architrave above the posts and the *cella* wall. Be this as it may, in later times, a row of stone or marble columns was placed around the *cella* and roofed to form a colonnade and the decoration of *metopes* and *triglyphs* was now set above the outer columns. A frieze in low relief was added to the walls of the *cella*, this frieze being viewed from within the cool ambulatory of the colonnade.

In the most developed form of a Greek temple, for example, the Temple of Artemis (Diana) at Ephesus, the *cella* was surrounded with a double row of columns, while the porticoes at front and back showed a vista of three rows of columns, the original two columns in the *pronaos* and *posticum* being added to the double row surrounding the *cella*. In time, too, the parts of the column were differentiated into base, shaft and capital, while the entablature was made up of an architrave, the frieze of *metopes* and *triglyphs*, and cornice, except at the front and back where the porticoes were surmounted by a triangular pediment, with carved groups in the round. But the outstanding truth is that, in spite of these refinements and embellishments, to the last the Greek architect held to the simplicity of the early form. Always there was the central *cella* and the surrounding porticoes and colonnade. At no time was a Greek temple of great size; some of the most famous are no larger than an ordinary English parish church. For size and mass the Greeks substituted grace of detail and logic of design. There was reason for everything in a Greek temple; every part, and every part of every part, was a harmony. Perfection of craftsmanship and intensity in working out a limited number of established forms constituted the Greek ideal, rather than ever-increasing size and embellishment.

Doric architecture and its decorative sculpture did not spring into sudden being, like Athena from the head of Zeus. The beginnings of a Greek House of God date back hundreds, even thousands, of years. About the time the Indian Aryans were making their way into the Punjab, other steppe tribes were pushing along the Danube valley and thence into the Balkan areas, where they were near neighbours

of the primitive inhabitants of Greece and the Greek islands. Owing to the pressure of other steppe dwellers, swarms of sturdy, tall, blue-eyed, sandy-haired invaders, speaking an Aryan dialect, crossed the Balkans and imposed their rule upon the primitive inhabitants of the Ægean area. In the following 1,500 years, the Greek invaders and the earlier inhabitants established settlements in the Greek peninsula, in the Ægean islands and on the coasts of Asia Minor, and saved themselves from slavery or extinction by building citadels with walls formed of huge stones. This was the so-called Cyclopean architecture, the name coming from the Cyclops, fabulous giants who tore great rocks from the hills and piled them into mighty strongholds. Among these settlements were Troy, Mycenæ, Tiryns and Knossos, the first at the entrance to the Dardanelles, Mycenæ and Tiryns on an important trade route commanding the isthmus of Corinth, and Knossos, the capital of a sea-empire based upon the possession of Crete. By 1500 B.C. Crete—the Venice of Antiquity—had won the headship in a maritime confederacy which controlled commerce in the eastern Mediterranean.

In early Cyclopean architecture, the points between the unwrought stones were filled with clay and rubble, but later the big stones were carefully squared and bonded without rubble. The Citadel of Tiryns was 980 feet by 330 feet, and was surrounded by a wall formed of blocks of stone between 6 and 10 feet long and 3 feet wide, the wall being 65 feet high and 26 feet thick. There were spacious courtyards, halls with pillared porches and vast magazines for the storage of food and munitions of war.

The ruins of Knossos were excavated by Sir Arthur Evans from the Cretan mound known as "The Gentleman's Head," and have been described by their discoverer in the four volumes of his *Palace of Minos* (1935). The buildings were found to lie around a great central court, 200 feet long and 100 feet wide. A strong wall with bastions and guard-houses enclosed the whole settlement. Though not fortified, it was always ready to stand a siege. There were great store-houses containing rows of earthenware jars for oil, grain, wine, dried fruits and other non-perishable foods. Works of art were found in great variety, including fresco wall paintings, reliefs, marble carvings and ivory statuettes, but of distinctly religious architecture there is little or nothing. Two chambers, ornamented with the sign of the double axe, have been identified with a tribal shrine, and the bath in the throne room may have been used for ceremonial ablutions. The Ægean civilisation reached its zenith about 1400 B.C., under a priest-king who may be associated with the fable of Minos of Crete. The throne of Minos may still be seen in its place, carved from solid stone, set against a wall painted with frescoes of the sacred gryphon. Legend tells that every nine years Minos held converse with Zeus in the Dictæan cave, when he received instalments of the code of laws, which were recognised throughout the Minoan Empire, as the god-given laws of Moses and Hammurabi were recognised in Judæa and Babylonia. Figures of the Snake goddess and the sacred relics of her cult, including a marble Greek cross, were also found. It would seem that the ritual of the priest-kings of Knossos was so simple that it

did not require a special temple ; all that was wanted was a room in the priest-king's palace. This is not surprising. In early Attica, Athena was a visitor "in the well-built house of Erechtheus."

At no time was Greek religious thought associated with an elaborate creed, nor was the Greek priesthood organised into a hierarchy, though priests and priestesses superintended sacrifices and assisted the civic officials in the organisation of public festivals.

In early times, Greek ritual seems to have been magical rather than propitiatory and there was no idea of gaining the favour of powers superior to man by sacrifice, prayer or praise. These elements were added to Greek religion later. When shrines were needed by a semi-wandering people, it was natural that sanctuaries should arise in clearings in the primeval forest. Such a clearing, as has been said, was enclosed by a fence and included a few trees upon which the skins of sacrificial victims were hung. At the foot of the sacred oak, in the centre, the priest of the grove offered prayers or sacrificed to Zeus. From such a ritual of prayer and sacrifice, the transition to temple worship was simple, especially when the ritual of the unwrought stone was added to the magical element already present in primitive Greek religion. At first Zeus and Hermes were no more than spiritual forces associated with inscribed boundary stones ; then an altar was set up and store-houses were added. By this time the Greek gods were divided into two classes ; those who were the sources of good things —the Olympians—and those who were connected with calamities and punishment. As Isocrates said, "to the first we erect altars and temples. The second are not worshipped with prayers or sacrifices ; instead we perform ceremonies of riddance."

Very significant, too, was the festal element in Greek religion, which has already been mentioned in connection with the representation of the Pan-Athenaic procession on the Parthenon frieze. Plato tells in *The Laws* that the gods, pitying the toilsome race of men, appointed the sequence of religious festivals to give them times of rest and gave them the Muses and Apollo, the Muse-leader, as fellow revellers. Pericles, in his speech in honour of the Athenian dead, made it one of the boasts of Athens that for the spirit had been provided many opportunities for recreation, by the celebration of games and sacrifices throughout the year.

The festivals included athletics, chariot racing, military tournaments, dancing, musical competitions and the recitation of Homeric poems and tribal histories. If some of these acts seem non-religious to the twentieth century, it is because we are apt to forget the primal unity of art, science and religion. Sitting in the theatre, the Athenian was within the *temenos*, or precinct, of the god. The actors wore ritual garments and, before the play began, the image of the god was borne into the orchestra by a band of youths bearing torches. The priest of the god had a place of honour in the theatre, and in front of his seat was a stone frieze carved with a representation of the Cretan ritual which was concerned with the coming of spring, thus associating the dramatic performance with the "calling up" of the Earth Mother,

or the "driving out" of the Ox-hunger. The procession of Athenian youths which initiated the festival of Dionysus led a bull in procession headed by the chief-priest and priestess of the god and accompanied by women who wore bulls' horns. Even if the participants in the ceremony had forgotten it, it is certain that the bull was a luck-bringer and the rite had its origin in times when the nomad ancestors of the Athenians leapt for "fleecy flocks and fruitful fields." Greek temple architecture attained full beauty when the crafts of architect and sculptor were fused with the accretions which collected around the original ritual of magic and thus formed a unity, in which Greek logic triumphed yet again over the disorderly methods of the *barbaroi*. The Doric temple showed that Greek sight, as well as the Greek mind, had learnt to abhor confusion and took delight in the lucid arrangement and articulation of parts, and in the due proportion between support and burden in architecture.

The oldest existing Doric temples are the Heraeum at Olympia and the temple at Corinth, dating from about 550 B.C. The temple at Aegina dates from about 480 B.C., the time of the Persian War. The great temple of Zeus at Olympia, with the chryselephantine statue of the god by Phidias, was built about 460 B.C. The Parthenon itself was commenced in 447 B.C. and was completed in 438. By this time the last factor essential to transform Greek into Hellene was present, the city-state system. By about 650 B.C. the military colony or rural community had given place to the city-state. It was life in and for the city-state, which distinguished the Greek in Mycenæan times from the Hellene who fought with Persia, and built temples upon the Acropolis. So far as politics were concerned the essential factor in Hellenic civilisation was the *polis*, the social system in which every citizen could exercise personal influence upon the decisions of the whole body politic. In a Greek city-state the life of the individual was largely merged in that of the community. Church-going was not a private but a public act. In every direction the individual found himself an integral part of the State; not because the State claimed his forced labour as in Egypt, or demanded his fighting powers as in Assyria, but because he and his fellows actually were the state. There was no government in Athens as distinct from the people. The Athenian political system furnished opportunities for all the energies of its citizens—physical, mental and spiritual—and yet the imagination of man was free to develop as never before. In Dr. Butcher's words—"For the Greeks the paramount end was the perfection of the whole nature, the unfolding of every power and capacity, the complete equipment of the man and the citizen for secular existence."

Above all, the Greek was curious about the myriad things which the mind of man can grasp, rather than the myriad ideas which can only be dreamed of. We do not find in Greek architecture all the thought and emotion of which humanity may become possessed, but the Greek trust in clear thinking carried architecture far. The same fearless intellectuality and clarity of vision which the Hellenic Greeks applied to their drama or the pursuit of knowledge, they used for the refinement

of the Doric temple. At his best the Greek architect never pressed beyond the point where perfect expression was possible. Vagueness was abhorrent to him. Instinctively he felt that the unknown was the point where full expression tended to become impossible. There was experiment in Hellenic architecture, but not in the Gothic sense of development by failure and repair. The Hellene rather sought constantly to refine upon a simple general type. In Gothic architecture development came through the necessity for repairing breakdowns rather than by striving towards a definite intelligible ideal, such as the Greeks had in the common Doric type with its supporting columns and the super-incumbent architrave. The Greek architect, therefore, was spared the final catastrophe of Beauvais, which proved the fruitlessness of further experiment in the Gothic manner. In a Doric temple, the engineering element was small. From the beginning the architect knew that his main plan was sound. Indeed, this was the high virtue of the Greek. He was obsessed by the possible ; he had learnt the limitations placed upon all human effort. The human figure is between 5 and 6 feet ; this is the standard by which men should judge the works of men, and this gave *scale* to a Greek temple. Vast size and variety are certainly impressive, but when the human scale is disregarded the spirit of man tends to be depressed rather than satisfied. The Hellene never forgot that he was building for his fellows and not for super-men or Cyclops. The Doric columns, and the entablature resting upon them, were calculated to give a sense of repose, as well as of sufficient strength. They obeyed the basic law in architecture whereby burden and the support should seem a harmony ; there was a perfect adjustment of means to secure the desired end.

The Hellenic as opposed to the Greek spirit began to show itself about 1000 B.C., when the Doriens, Aeolians and Ionians, the last of the steppe invaders, crossed the Balkans. They conquered by force of arms, but sooner or later these Greek adventurers beat their swords into ploughshares and their spears into pruning-hooks. Intermarrying with the earlier inhabitants, they became agriculturists, pastoralists and traders. As traders they came into contact with the civilisations of Egypt and Babylonia. Between 1000 and 700 B.C., Greek colonies were established in many parts of the Mediterranean, especially in Sicily and Southern Italy, colonies which were later to build the temples of Paestum and Girgenti. Different colonies evolved slightly different building methods, so that knowledge accumulated rapidly. It also spread rapidly. In those days the sea was a great highway, and the position of Greece between Asia, Crete, Carthage, Egypt and Italy, made Hellas an ideal place for a race which was ever seeking knowledge, ever ready for new experience. As the colonies demanded increasing quantities of manufactures, the Hellenic Greeks were able to replace their shrines of wood and brick with temples of stone and marble. During the second half of the sixth century B.C., Doric temples were built in all parts of the Greek-speaking world. The ruins at Aegina and Selinus recall the general type. Sculpture was the twin sister of architecture, and pediments, metopes and friezes were adorned with carved groups and

reliefs. In Greece, the tyrants, who had usurped the power in many states, spent large sums of money in beautifying their capitals. Pisistratus, who ruled as a tyrant after 560 B.C., brought the festival of Dionysus from the countryside to Athens. A new theatre was opened in 535 B.C. Aeschylus was born ten years later. Above all, Pisistratus gave Homer official recognition and arranged for the recitation of the heroic saga during the Panathenaia. Listening to the Homeric poems, the Athenians gloried in the deeds of individual heroes, and the "old vessel of the ritual dithyramb was filled with the new wine of the heroic saga." The influence of the Homeric poems changed the Greek religion from uncritical belief to imaginative faith. Greek religion no longer consisted of magical ritual. In place of the dead "herm" came the living god, Hermes. Poets sang the myths of the Olympians, and sculptors carved their images and set them upon the house of the god or goddess around which the people gathered at seasons of festival.

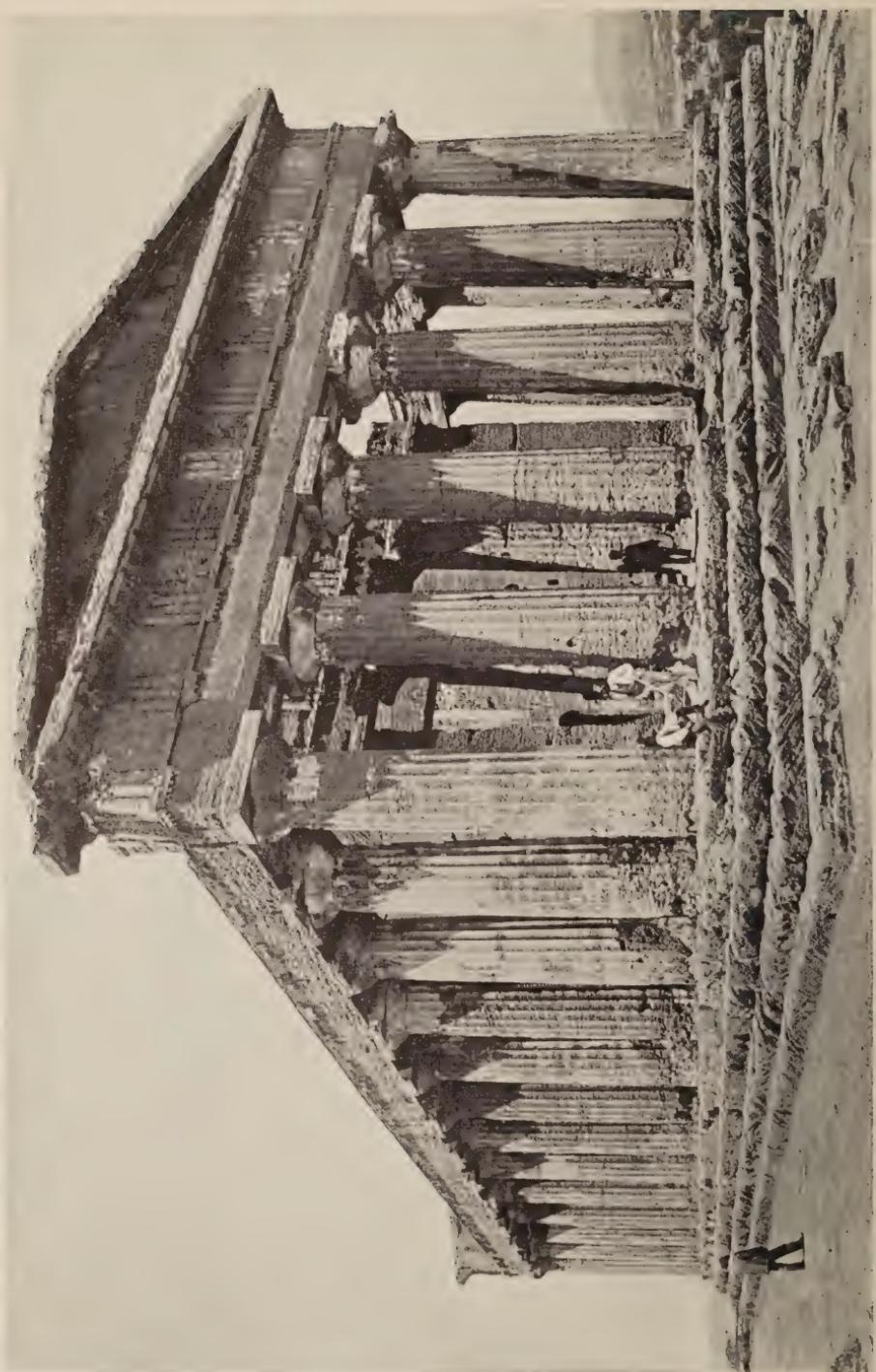
The Ionic colonies in Asia Minor were the first Hellenes to acquire material prosperity and win the leisure which makes a finished art possible. In Ionia, constructive imagination was combined with a highly developed critical faculty, and it was to Ionia that Pisistratus went for builders. Ionians, skilled in the working of marble from Naxos and Paros, instructed their Athenian cousins. Many of the refinements of artistry found in the Parthenon were still wanting, but a new method informed architecture. Men had grasped the truth that the actual size of a building and the impression of bigness were not one and the same thing. There is a relation between ornament and the larger elements in a design which controls the impression of size and makes one building beautiful and full of meaning and another ugly.

THE DORIC TEMPLE

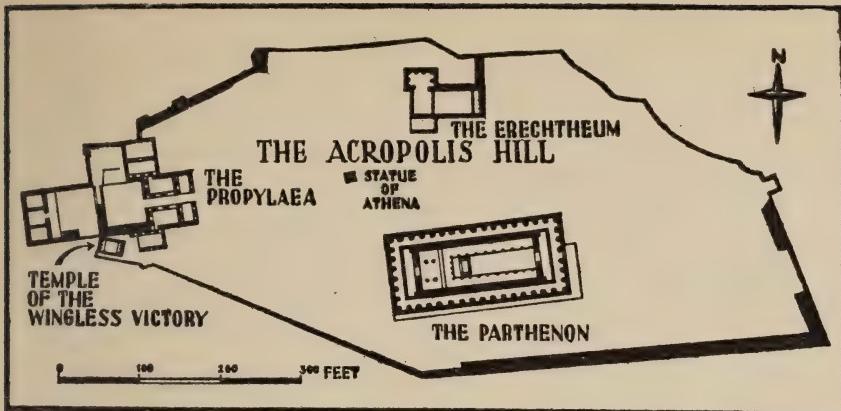
The questioning spirit of the Ionian Greeks, who laid the foundations of science not only for the Hellenic world but for Western civilisation, echoes through all Greek architecture. Many problems which later builders set themselves, the Greeks avoided. Their style of building only involved a downward thrust; every part was made secure by its own weight. The Greek builders never had to solve the problems incidental to lateral or sideway thrust, as did the Romanesque and Gothic builders. Reason taught the Greek architect not to mix the arch and the dome with lintel architecture. He knew of both, not only through Egypt and Babylonia, but from the experience of his own race in Mycenæan times. By experience, the designers of Doric temples learnt that the area of the facade covered by the supporting columns should be roughly the same as the area of the entablature and pediment. After experiment, they decided that the space between Doric columns should roughly equal the area of the columns themselves, though, in the Ionic style, the space between was double that of the columns. Having reached these general conclusions, experience showed that the outside columns should be set closer together in order to give the

THE PARTHENON, ATHENS



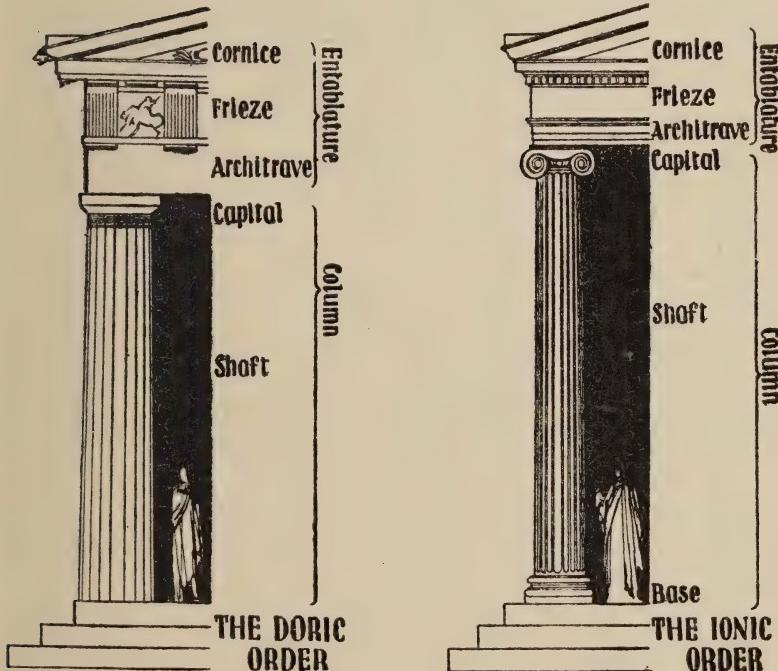


THE TEMPLE OF CONCORD, GIRGENTI



THE ACROPOLIS HILL

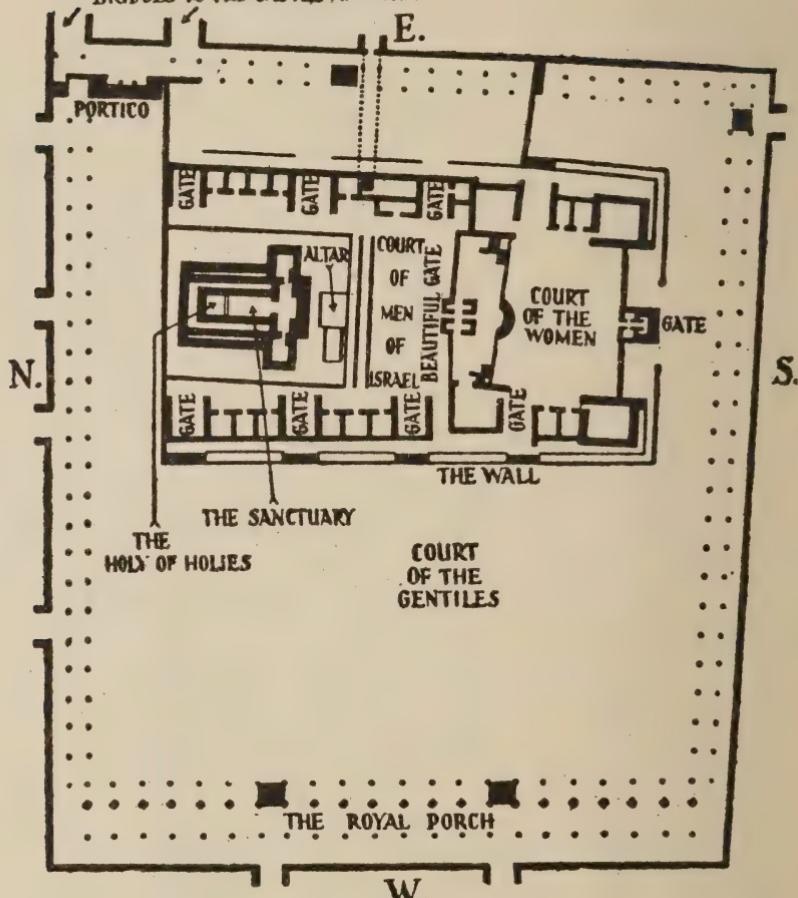
(see page 30)



THE DORIC AND IONIC ORDERS

(see page 40)

BRIDGES TO THE CASTLE ANTONIA



HEROD'S TEMPLE

(see page 48)

appearance of strength at the corners. In the facade of the Parthenon, the distance between the columns at the corner is 6 feet, compared with 8 feet elsewhere. Again, the Greek architect learnt that straight horizontal or vertical lines tend to deceive the eye; horizontal lines appear to sag midway, while vertical lines slant outwards the higher they run. Accordingly, the Greek devised the necessary modifications by curvature and other adjustments, which would correct the visual impression, horizontal lines receiving a slight upward curve and vertical ones a slight inward inclination. Columns were carved so that they swelled towards the middle and then diminished in diameter. This curve, or *entasis*, prevented the column from appearing "hollow." The axes of the columns in a well-designed Greek temple were slightly inclined inwards, so as to counteract the tendency which a vertical column has to appear to lean outwards. The columns of a facade not only inclined slightly inwards, but they were wider at the bottom than the top. In the Parthenon the columns of the peristyle are 6 feet 2 inches wide at the bottom and 4 feet 10 inches at the top, while the angle columns are an inch or so wider than the others, the reason being that they stand against the sky and so appear rather less in size than they are in reality. The Doric columns, owing to their greater mass, diminish more in proportion than those of the Ionic order. Fluting was an additional grace, rendered necessary by the brilliant sunshine of Greece, if the cylindrical character of a column was not to be lost. Finally, in the Parthenon, the rise of the long row of steps (the stylobate) is 3 inches on a front of 101 feet and 4 inches on a side of 228 feet, the rise in the long line of the entablature above being much the same. The steps themselves were a little high for ordinary use, but only enough to add dignity to the building. Many of these delicacies of craftsmanship are not found in the less important temples, the Theseum, for example. They were only possible with highly gifted craftsmen, and where marble and not limestone was used. It is noteworthy that, while the Parthenon is four times as large as the Theseum, the proportions are the same, the columns have the same number of flutings, the capitals the same mouldings, and the entablature the same divisions. The entablature, or burden supported by the columns, consisted of three parts—the architrave, which actually rested on the columns, the frieze and the cornice. The columns, however, were combined with the entablature in different ways, giving rise to the three Orders, the massive Doric, the graceful Ionic, and the ornate Corinthian.

The exquisite taste, which refined upon the design of the *cella* and its surrounding colonnade, had play in the decoration of an Hellenic temple. The sculpture was confined to places where it would not only have its due effect but be in accordance with structural conditions. Unlike the Egyptian, the architect of a Greek temple was almost wholly concerned with exterior effects. In Egypt, most of the columns were inside the building, in Greece, they were outside. In an Egyptian temple, save for the pylons of the gateway, the exterior was no more than an undecorated blind wall. In Greece, the temple was a shrine, and a meeting-place on days of festival. Though the frieze was an object

of beauty and instruction in itself, it was also a mural decoration and part of the *cella* wall. The Parthenon frieze was 3 feet 4 inches high. The triglyphs were not carved with a set design, but were suitably fluted, sculpture being confined to the non-structural *metopes*.

One other development calls for explanation—the difference between the Doric and the Ionic order. The Ionic column, dating from the middle of the sixth century B.C., was more graceful and elegant than the masculine Doric, and the Ionic capital, instead of being cut square, was longer one way than the other, the free ends being carved into spirals. It was an adaptation of the Egyptian papyrus form, but the comparison only serves to emphasise the grace and significance of the Greek as compared with the Egyptian column.

The character of a Doric or Ionic column extended beyond the support to the thing supported. For this reason we speak of the Doric or Ionic *ordo*, or order. In the Ionic order the columns were placed farther apart than in the Doric, and each order preserved certain relative proportions between its parts, and confined itself to its own distinguishing mouldings and ornamentations. That the Ionic architrave might not seem to crush the delicate volute, a thin moulded *abacus* was inserted to bear the weight of the entablature, the volute being thus left free. When used at the corner of a building, a special form of capital was designed in which the outer volute was turned at an angle of 45 degrees, and so did duty for both front and side.

The Doric order was most popular in Greece itself, and in the Dorian colonies of Southern Italy and Sicily. After 500 B.C. the Ionic order became common in the Greek cities of Asia Minor, but famous examples may be seen in Athens, as in the Temple of Nike and the Erechtheion.

The House of Erectheus, the Erechtheion, was perhaps the oldest religious shrine in Attica. It stands on the opposite side of the Acropolis hill to the temple of Athene Parthenos, and the present temple was built after the death of Pericles to mark the site of the fabled struggle between Athena and Poseidon, carved on the pediment of the Parthenon. The Erechtheion was built on sloping ground, and had entrances at different levels. Moreover, it not only housed an ancient image of Athena, but included the shrines of several nymphs and heroes. Hence its peculiar irregular form, with three porticoes. Most famous and most original is the so-called Portico of the Six Caryatids. The marble maidens stand upon a parapet and support the roof of the porch. One of them may be seen in the Elgin Room at the British Museum, forlorn but ever lovely. She bears upon her head the suggestion of architectural burden, a capital with egg and dart moulding, and its surmounting *abacus*. Like the figures on the Parthenon frieze, this Maiden of the Porch is more than sculpture, more than architectural decoration. It is part of a religious rite, which has taken a marble form. The Maiden is, in truth, one of the stately ladies of Athens, wearing the peplos of a festal day, and taking her part in the service of the Virgin goddess. The strong youthful figure and the lines of the drapery happily accord with the architectural purpose.

The Ionic columns in the Temple of Diana at Ephesus were fitted

with elaborately carved drums, standing upon a base of broad marble steps. But, in general, the refinements upon a Greek column did not go beyond the Doric and Ionic forms. The Corinthian form, though of Greek invention, is rare in Hellenic architecture, and may best be regarded as a thing of Roman taste and Roman development. The Corinthian order seems to have been evolved about 420 B.C. Of its origin, a fable, narrated by Vitruvius, tells that the Corinthian sculptor, Callimachus, saw an acanthus plant growing around a basket, with a tile on top containing a girl's toys, which had been set before a tomb by the dead child's nurse. Thus he conceived the Corinthian capital, the basket representing the column, the *abacus*, the flat tile, while the acanthus leaves fill the basket and branch out to clutch the angles of the square tile above. First there are two tiers of leaves and then the pairs of *caulicoli*, or stem leaves. The lower of the *caulicoli* are half opened, the upper being closed so that they form volutes; the only addition is a *rosette*, or flower, in the middle of the *abacus*. The core of the column carries the weight; hence the flower-clad capital juts beyond the entablature in a classical temple.

Architecturally, the function of the capital is to provide a broad surface on which a lintel can rest, or from which a pier-arch may spring. Incidentally, it marks the spot where the element, support, is distinguished from the element, burden. A very proper point this for decoration which shall add, at once, beauty and significance to a building. Later, in Byzantine times, a *dosseret*, or impost block, was placed above the *abacus*. In the Christian church, as opposed to the classical temple, interior space was essential, and the column had to carry an arch and the clerestory wall above, which reached to the timbered roof, a much heavier burden than the classical entablature. That the column might bear this weight easily the impost block, or *dosseret*, was placed on the *abacus*, and from this the arch sprang. In time the *dosseret* became so closely associated with the capital that the two parts could not easily be distinguished, while the original *abacus* was cut down to a hollow-sided form, so that the *abacus* and *dosseret* were virtually united, the one time *abacus* being no more than ornament recalling the original rosette of the classical capital. Sir T. Jackson, in *Reason in Architecture*, has a delightful chapter upon the capital and its development.

Mention has been made of the physical labour involved in transporting the Egyptian and Assyrian monoliths. Compare the labour by which an Athenian temple was built. A fourth-century inscription at Eleusis tells that the first thing was to cut a road from the quarry to the city, which was paved with grooved stones, with sidings at intervals. Then wagons were made. A journey of 30 miles took three days and thirty or forty pairs of oxen were required for the large stones. The best marble came from Mount Pentelicus, near Athens. It was a close-grained stone which weathered to a colour of rare beauty. Parian marble was used for sculpture at times, while the dark grey marble of Eleusis was used as a contrast to the white marble of Mount Pentelicus in the Propylæa. Many temples, however, were made of limestone, and where mouldings were required the parts were covered with a thin layer of marble-dust

stucco. At Paestum and Girgenti, portions of the stucco on capitals can still be seen.

At the quarry, the drums of the columns were cut with projecting points, *ancones*, which made it easy to hoist the blocks into position, the *ancones* being dressed off later. Penrose in his *Athenian Architecture*, tells that in constructing a temple the first thing was to lay down the pavement and steps, leaving the surface of the marble rough. Then outlines were drawn on the pavement where the columns were to arise. When the lowest drum was in place, the fluting was commenced as a guide to those who set the remainder of the drums in their place. Then the entablature was set upon the columns, the surfaces being left rough. Only when the whole construction was complete were the surfaces and mouldings smoothed and polished and the pigments added. The fluting of the columns was done from the top, the carvers being guided by the fluting lines already indicated on some of the drums. The last part smoothed and polished was the stylobate, or stairway, at the bottom. In the Funeral Oration to the memory of those who fell in the battles of 431 B.C., Pericles said that it was the boast of the Athenian to remain an amateur, to be supreme in improvising remedies for emergencies. For this reason, the Athenian had a supreme joy in the exercise of his faculties. The difference between the conditions in Athens and those in Egypt and Assyria is manifest, but Mr. Zimmern recalls that there was also a vast difference between the methods of the Athenians and the ways of our own masters and workers. The industrial system to-day tends to take the joy from craftsmanship and so chokes the very springs of art. It has replaced the skill of the human hand by inhuman machinery. It has substituted a deadening cash-nexus for the old-time effort in a corporate cause. In Athens, the supervising master-craftsman worked among his apprentices, receiving little more pay than his stone-cutters. An inscription from 409 B.C., and relating to the Erechtheion, tells that twenty-seven citizens, forty free outlanders and fifteen slaves were engaged on the work. A column was fluted by a squad of four to six men under a master-mason. All were paid a drachma a day, or about four shillings in twentieth-century currency.

It may be that the marble-capped hill of the Acropolis is too ordered a setting for the full beauty of a Greek temple to show itself. Set in some wild and barren upland, far from the haunts of men, its poetry makes an even deeper appeal, though its historic significance may be lost. Those who feel thus have the memory of the temple of Poseidon at Sunium, now a noble ruin crowning a solitary cape rising 200 feet sheer from the sea. The temples at Paestum near Naples, the temple of Apollo at Bassae and the temple at Segesta, are others that seem to gain a new grace from the solitude in which they rear their beauties. The hexastyle temple of Poseidon (Neptune), at Paestum, has all the thirty-six outer columns standing. The plan is unique in having nine columns at both ends, the extra three being due to columns dividing the interior into two aisles. At the east end of the temple stood an altar, 70 feet long and 20 broad. The smallest of the shrines at Paestum is the very perfect temple of Ceres, with thirteen columns at the sides of the

cella and six columns at either end. The tapering of the columns in this temple is marked, the diameter being 4 feet at the base and $2\frac{3}{4}$ feet at the top. The temple of Ceres is 105 feet long and 45 feet wide, compared with 197 feet long and 80 feet wide, the size of the temple of Poseidon.

The five temples at Girgenti in Sicily were built upon a long straight lofty wall crowning a steep slope of Mediterranean coast land. The temple of Zeus at Girgenti, commenced by Theron about 480 B.C., was never finished, owing to the Carthaginian invasion. The decoration included a number of big male figures carved in stone, each about 26 feet high. They were vigorously modelled, and seem to have been intended to be seen from afar. The so-called temple of Juno stands on the cliff-edge, overlooking the sea. Twenty-two of the thirty-four columns are intact. It had a portico of six columns. The other hexa-style temple at Girgenti is known as the temple of Concord. All the thirty-four columns of the peristyle are standing. At Segesta, another Sicilian site, the temple was built by Hellenised Sicilians and is unfinished. It is not even roofed, but very lovely in its setting of desolate hills. The columns are unfluted, and on the edges of the stylobate may still be seen the projecting bosses left to give a purchase for the ropes used in lifting the heavy blocks of stone.

If art arose when man was first possessed by the idea of an unrealised principle of order and proportion, Greek architecture and its decorative sculpture nearly approached one of the few perfections allowed to man. Nevertheless, Greek civilisation was the possession of a strictly limited number of people. With the coming of Alexander, the times were ripe for the organisation of Rome, which was to give to the western world the knowledge and art which a few hundred thousand Hellenes had won. Necessarily, the Hellenic effort was short-lived. Emotional and cerebral activity, in a nation as in a man, cannot remain at white heat for long. Moreover, such an institution as the *polis* presupposes a strictly limited number of citizens. Only for a few years could the Greeks keep heart and mind eager for any experience and any adventure. This energy of mind and heart was the dominating characteristic of Greece during the 150 years which followed Marathon. As the Corinthian envoy, quoted by Thucydides, said of the Athenians : "They are revolutionary, equally quick in the conception and the execution of each new plan. They are always abroad, for they hope to gain something by leaving their homes. They deem the quiet of inaction as disagreeable as the most tiresome occupation." When the pricking desire for knowledge and experience passed away, the Hellene became Hellenistic. At the same time the city-state system waned before the military strength of Macedonia. When Athens and the other city-states failed to withstand Philip and Alexander, social and political life were changed and a new art arose. In the Hellenistic age, the Greek essayed to show not only the Mediterranean world, but Egypt and Persia, the value of that clarity of expression which was the supreme beauty of Doric architecture.

The Hellenistic period dates from 323 B.C., when Alexander died, to the sack of Corinth in 146 B.C. by the Romans, though it may be

extended by a century to include the conquest of Syria by Pompey. During these 300 years, the lands between the Adriatic and the Indus were united into one Hellenised-Oriental Empire, with Greek cities arising in all parts. Greek architects and builders were to be found at work in places as remote from Athens as Alexandria and Pergamus, while a semi-Greek style arose in Bactria. But Hellenistic history was made by men rather than by city-states, and a restless egoism took the place of the singleness of purpose which had characterised the art of the Hellenic age.

Pergamus, with its citadel, was the fullest expression of the Hellenistic age. After Alexander's death Lysimachus accumulated a vast treasure in the Acropolis at Pergamus. Placing his lieutenant Philetairus in control, he occupied himself with a career of conquest. A rebellion under Philetairus resulted in the seizure of the treasure and the foundation of the Kingdom of Pergamus in 283 B.C. Immediately, came the testing time. Hordes of Gauls were pouring through the Balkan passes and threatening the Greek world. Some of them crossed the Bosphorus and founded the Gallo-Greek Kingdom of Galatia. Allying himself with the ruling Seleucus, Attalus I. of Pergamus defeated the Gauls in 241 B.C. The results upon the art of the builder were not unlike those which followed Salamis. A great series of public buildings were put in hand until the Acropolis at Pergamus rivalled that at Athens itself. The second defeat of the Gauls by Eumenes II. (197 to 159 B.C.) led to the building of the great altar of Zeus at Pergamus. It stood upon a base 100 feet square, a little below the temple of Athena, on the south-west terrace, and was surrounded by an Ionic colonnade. The worshippers approached by a broad stairway. Around the whole structure was carved a frieze in relief, so high that many of the figures project beyond the architectural setting. The great altar was excavated by the young German engineer, Carl Humann, and is displayed with fine effect in a hall of its own in Berlin. Colossal figures, 9 feet high, picture the triumph of Athena and the battle of Zeus and the Giants. They display technical skill and vigour of imagination, but the controlled intensity of thought and emotion of the Hellenic Athenians was not for the people of Hellenistic times.

The Hellenic impulse was outworn and the world was ready for a new thing when the Roman rule finally extended to Asia Minor and Egypt, as well as to Greece itself. In 146 B.C. Greece was conquered by Mummius and became a Roman province. In 133 B.C. Attalus III. willed Pergamus to Rome. In 65 B.C. Pompey ended the rule of the Seleucidae in Syria. When the rule of the Ptolemies in Egypt closed after the sea-fight at Actium, the last Hellenistic stronghold fell. It was left to another Aryan stock, the Roman, to give a new life to architecture and establish a tradition of religious art which was to serve Christendom until the coming of the Romanesque and Gothic builders.

CHAPTER IV

JEWISH FAITH AND ROMAN ORGANISATION

The Emperor Justinian's church of the Holy Wisdom at Constantinople may be regarded as the first Christian cathedral. Earlier, there were shrines in honour of tribal or national deities, and certain pagan buildings had been adapted for Christian worship and even for the reception of a bishop's throne. But there was no independent invention of a gathering place in which the townsfolk of a great metropolis could follow the performance of sacred rites and lift their hearts in communal prayer and praise. Justinian's church was the culminating triumph of more than 1,000 years of architectural invention, and it is of interest to recall the factors which contributed to its creation. One has already been mentioned, Greek science. The other factors were the religious beliefs of the Jews and the organisation of the Roman Empire. Both were changed when Christianity became the established faith of the Roman Empire, but they require to be understood in their native forms if their contribution to distinctively Christian architecture is to be understood.

This chapter treats of the House of God among the Jews and pagan Romans and passes in rapid survey the religious beliefs of an Eastern and Western people during 1,000 years; in the case of the Jews, the 1,000 years between the building of Solomon's Temple and the destruction of the Temple of Herod, and, in the case of Rome, the period between the foundation of the city by Romulus in 753 B.C. to the Edict of Constantine which closed the pagan temples in A.D. 324.

Amid much that differs there is something that is akin between the genius of the Hellenes and that of the Jews. Both were intensely national in their outlook; yet, in breaking from the confining limits of nationality they passed on the essence of their national experience to the world at large. Both civilisations owed much to their sense of the sublime worth of liberty. But whereas the desire for liberty led the Greek to unfold every capacity of man, it led the Hebrew to visage God from every standpoint, until the Jewish conception of Deity became fitted to be the God, not only of a tribe and a nation, but of the Western world.

One among a number of petty states which had temporarily shaken off the dominion of Egypt and Babylonia, the Jews gave birth to a series of leaders and prophets of astonishing religious insight. Aided by their guidance and teaching, the Jews persisted, when other states and empires passed from history. How absolutely national unity depended upon belief in a single God is proved by the dispersal of the ten tribes. The builders of the Temple at Jerusalem were the people of Canaan who held to the belief in Jehovah.

What must have happened had the faith been absent may be gauged by the fate of the Hittites, a people who had far more natural advantages than the Hebrews, and yet passed away while the Jews persisted. The Hittites were among the welter of tribes in Syria and Palestine, and established themselves in Asia Minor along the bridge between Asia and Europe, their first capital being Boghazkeui on the northern mainroad from Ephesus to the Cilician Gates. Later the Hittites moved their capital to Carchemish on the Euphrates. The shrine of the Earth Goddess at Boghazkeui was a natural recess in an outcrop of rock, decorated with bands of symbolic sculpture. At Carchemish, the remains of a shrine have been unearthed, which was once the Hittite equivalent of the Temple of Solomon. The great limestone slabs are there and fragments of enamelled bricks decorated with floral designs. But almost the only thing which really recalls the Hittite faith and art is a basalt laver, resting upon two great oxen, which was set before the shrine at Carchemish about 1000 B.C. Much more surely does the Temple of Solomon live to-day in the Bible description of the Book of the Kings.

"And he made a molten sea of ten cubits from brim to brim, round in compass, and the height thereof was five cubits. It stood upon twelve oxen, three looking towards the north, and three towards the west, and three towards the south, and three towards the east; and the sea was set upon them above, and all their hinder parts were inward."

Jewish history, like that of the Hittites, owed something to geographical situation, but more to religion. It was from the national faith and trust in Jehovah that the genius of the Jews developed. Beyond the low-lying plains of Philistia, the country of Judæa rises in terraces to the drear plateau on which Jerusalem was built. The city arose on a rocky eminence formed by two deep gorges, one, the Kidron valley, and the other the valley of Hinnom. Running at right-angles, the precipitous sides of the valleys protected Jerusalem on the west and south. On the other sides, the city was protected by walls. A fortress was built above the Kidron valley where the rocky cliff was most precipitous. Here was the King's Palace, with the House of Heroes for the royal bodyguard. Where the cliff was highest, on the bare rock of Mount Moriah, was built an altar to Jehovah. Around this altar, by the use of great slabs of white limestone, a platform 1,000 feet square was raised, on which Solomon built his temple, a building which was to be proof of the nearness of God to Israel. "I am," who once dwelt in the "thick darkness," was now to dwell in the midst of His people, in a House of Heaven, where He might abide for ever.

The Temple of Solomon might have been a Jewish Parthenon. In fact, its beauty was rather that of material and decoration than of structure. Essentially the Temple was a series of public courtyards. Only favoured priests entered the sanctuaries and the dwelling place of Jehovah, the Holy of Holies. Reading the 5th, 6th and 7th chapters of the 1st Book of Kings, we are apt to be deceived by the lyrical rapture of the Bible narrative, though even that makes it plain that the Jews were far behind

the people of the coastal plain in the art of building. Craftsmen from Tyre had a great part in the making of Solomon's temple. For the rest, there was the size of the wrought and hewn stones, the beauty of the cedar wood and the worth of the decorations of metal work, bronze, gold and silver. Nowhere do we feel that the Temple of Solomon was a real expression of the idea Jehovah, as the Parthenon was of the religious belief of the Athenians. Indeed, it is when the imagination lingers upon Solomon's Prayer in the 8th chapter that the real significance of the Temple comes to us. "Behold the heaven and the heaven of heavens cannot contain Thee, how much less this house that I have builded."

Centuries passed. The Temple of Solomon was destroyed. The Jewish poets learnt to know a God greater than the tribal deity, and the God of the Hebrews became fitted to be the God of the world.

"Thus saith God the Lord, he that created the Heavens and stretched them forth ;
 He that spread abroad the earth, and that which cometh out of it ;
 He that giveth breath unto the people upon it and spirit to them that walk therein ;
 I, the Lord, have called thee in righteousness and will hold thy hand."

The religious revival during the captivity in Babylonia, in which Israel arose above defeat and above national humiliation, was followed by an age of military glory. When the patriotism of the priestly family of the Maccabees, which freed the Jews from the tyranny of the Seleucidæ, degenerated into dynastic intrigue, the Idumæan, Antipater, secured control of Judæa, and his son Herod, in 39 B.C., took the title of king, by favour of Mark Antony, the Roman Triumvir. Herod's kingdom included Galilee, Samaria, Judæa and Peraea, Galilee being the most fertile and best populated of the provinces.

At all times, Herod was rather a Greek than a Jew. As a Greek ruler, he sought to be a mighty builder. Apart from his gifts of buildings to Athens and other cities in the Roman Empire, Herod built the citadel on the Temple hill, the theatre, the forum, the hippodrome, and other public buildings in Jerusalem. Then he essayed the rebuilding of Zerubbabel's Temple. There were difficulties owing to the reverence of the Jews for the house of Jehovah. Not a stone could be taken down until another was ready to put in its place. As iron is created to "shorten the days of man," no iron tool was allowed within the sacred area. Every stone was cut and squared at the quarries. As the Jews objected to Gentile workmen entering the holy places, Herod offered that these should be built by the Jewish priests themselves, wearing their priestly robes. Two years were spent in turning 1,000 priests into masons and carpenters. For the rest, Herod had 10,000 trained builders and 18,000 workmen. Work began in 20 B.C. The Outer Court of the Temple was enclosed by two rows of white marble columns 36 feet high, supporting a cedar roof. On the south were four rows of columns, and the porch was two storeys high. This was the Royal porch. On the east was

Solomon's Porch, where Christ disputed with the Jews. Within the Court were the stalls of the traders and money-changers.

The temple of Herod, like the temple of Solomon, was a place of resort rather than a place of communal worship. Here the faithful congregated at festival seasons such as the Passover, spending whole days in the various courts, exchanging ideas with friends. The gathering was more like the meeting of the Greeks at Olympia during the pan-Hellenic games than what English people describe as church-going. The Inner Court of the Temple was reserved for Jews, being separated from the Court of the Gentiles by a balustrade. The Inner Court included the Court of the Women, the Court of Israel and the Court of the Priests. Immediately within the balustrade were fourteen steps which led up to the higher inner platform. Then came a terrace with nine gate openings, each with double doors, 45 feet high and 22 feet broad, adorned with gold and silver. The gate on the east, leading to the Court of the Women, was of bronze and so heavy that it could hardly be closed by twenty men. Between the Court of the Women and the Court of Israel was the Beautiful Gate, 75 feet high, with two doors 60 feet high decorated with gold and silver. Here Jesus was presented when he was 34 days old, with a sacrifice of two turtle doves, and was blessed by Simeon and Anna. A flight of steps led to the Court of Israel, open only to male Israelites who were ceremonially clean. Here Jesus came when he was twelve years old. At the western end was the Court of the Priests, enclosing the sanctuary and the Altar, separated from the Court of Israel by a beautifully ornamented stone balustrade 1½ feet high.

The main body of the Sanctuary was 150 feet long, 150 feet high and 90 feet broad, being twice as large as that of Solomon's Sanctuary. It was built of immense blocks of marble, decorated with plates of gold. The white courts, porches and buildings rose, tier upon tier, like a palace of snow from a hill of gold. Nowhere was there any painting, and carved decorations were rare. Woven curtains, and gold, silver and copper work formed the ornamentation. (See plan facing page 39.)

Indeed, the metal-workers, carpenters and tapestry-makers who adorned the Temple were more potent than the architects, builders and sculptors. The walls shone with the plates of gold with which they were inlaid, while the roof was covered with an elaborate gold interlacing. What impression arises from this description? Surely that the Jew was in contact with the necessary spiritual influences, but he was unable to see architecture as an art, with its own laws and principles. Poetry was the real art of the Jews. Harsh and crabbed as the desolate grey tableland on which he dwelt, the Jew had none of the lively inventiveness of the Athenian. Only in the dramatic idylls of the Song of Songs, the book of Job, and the dreams of the greater prophets, did the Jewish imagination reach the highest planes of art. When their national genius built Zion it was in words, not in stones—

“Look upon Zion the city of our solemnities :

Thine eye shall see Jerusalem a quiet habitation, a tent that shall not be moved,

The stakes whereof shall never be plucked up, neither shall any of the cords thereof be broken.
 But there the Lord will be with us in majesty, a place of broad rivers and streams ;
 Wherein shall go no galley with oars, neither shall gallant ship pass thereby ;
 For the Lord is our King ; He will save us."

The Jew lacked what the Athenian had, a belief in architecture as a means of embodying the religious thought and emotion of man. To the Jew, when he passed beyond the conception of a tribal god, Jehovah was a far away wonder. The Greeks had a very different conception of divinity in its relation to man. They were curious about the myriad things the mind of man can know. Their faith furnished thoughts and emotions very fitting for expression in architecture and sculpture. Therefore, the Greeks succeeded where the Jews failed. But no true Jew desired to do anything else but fail.

"Cursed is the man who allows his son to learn the wisdom of the Greeks," thundered the Talmud.

Or again, the Jewish proverb :—" Go not near the Grecian wisdom. It has no fruit, but only blossoms."

Nevertheless, in other lands and in other circumstances, the God of the Jews was to be furnished with an earthly habitation of full beauty and significance. What Herod and the Jews of the first century failed to do, the builders of Justinian, and the masons and carvers of the Gothic age, were to do with full success.

ROME : REPUBLIC AND EMPIRE

The time is, roughly, 1,000 years before Christ—the age of Homer, of David and Solomon, of the growing power of Assyria and the waning power of the Hittites and Mycenæan Greeks. As was the case in Greece, Italy had been conquered by an Indo-Germanic race, with blue eyes, fair hair and tall stature, which contrasted sharply with the short dark-haired swarthy people who were in possession of the peninsula. The racial characteristics of the northern race quickly died out, but their language and much of their religion and social custom remained. The father of the family was the priest of the household, and the chief was the priest of the tribe. He propitiated the Great Spirit whose voice could be heard in the thunder, and who made the corn to spring up. In time, the religious office became the function of a caste, the priests being also the historians and scientists of the tribe.

Northmen of different types continued to crowd into the Italian peninsula during the eighth and seventh centuries B.C., the last being the Etruscans, a short, thick-set people who settled in the valley of the Po. By 500 B.C.—the time of Marathon—the Etruscans had overrun much of Italy, and their naval power was equal to that of the Phoenicians or Greeks. Etruria was a larger and more powerful state than the Roman

Republic for several centuries. The Etruscans, as Mediterranean traders, had knowledge of Greek culture and lived within Cyclopean walls of the Mycenæan type. They contributed the arch to European architecture, and so have an honourable place in the history of the craft. They also seem to have exercised a considerable influence upon the state religion of Rome. Whereas the Romans of the early Republic worshipped their gods without images and Jupiter reigned on the Alban Mount in a temple not made with hands, the Etruscans taught the Romans to build temples of wood and stone, such as that in honour of Jupiter Triumphant on the Capitoline Hill, where the architecture and ritual alike seem to have been Greco-Etruscan, rather than Roman. The porticoes of an Etruscan temple consisted of wooden posts and beams, from which terra-cotta slabs were suspended, and represent a decline, rather than an advance, from the architectural achievements of the Hellenes, not only in Greece but in Southern Italy. Here the Spartans had founded Tarentum about 700 B.C., in a sheep-breeding district. Cumæ, Rhegium and Sybaris were other important Greek settlements in Italy.

It was not the Etruscans in the north or the Greeks in the south who finally secured dominion over the Italian peninsula. In the Latins who lived in and near Rome was kindled a national spirit, which proved of richer potency than the strength of Etruria or the wealth of the Greek colonies. Even in the time of Romulus (753 B.C.) Roman citizenship had a value and the foundations of the future greatness of the town were being laid. Between the Capitoline and the Palatine hills was a market, common to the tribes which lived on the Seven Hills. This market later became the Forum. From the low hills the Latin women came to the ever-flowing spring sacred to Juturna, or took embers for the family hearth from the fire in the shrine of the goddess Vesta. The Sedes Vesta was the earliest of the Roman shrines. It was round in shape and domed in imitation of the early Italian hut of wattle. Here were kept the sacred relics which symbolised the continuity of family life and nearby was the House of the Vestal Virgins who tended the sacred fire. Not without cause did God and man choose this place for the building of this city, as Camillus cried, when advocating the rebuilding of Rome after its destruction by the Gauls in 390 B.C. "Most healthy and wholesome hills; a very convenient and commodious river, to bring in corn and other fruits out of the inland parts and to receive provisions and other victuals from the sea coasts; the sea itself near enough for commodities, but not exposed and open by too much nearness to the danger of foreign navies; the very heart and centre of all Italy."

Centuries passed, during which the Romans developed the principles of obedience and order which were to be the dominant factors in their social system, as freedom of mind had been in Hellenic life and art. Realising that administrative order was necessary to centralisation and empire, the Romans were willing to entrust real authority to the holders of the greater offices of state, a thing which liberty-loving Greece had seldom done. As a consequence, the life of the average Roman lacked the variety which had produced the intensely vitalised

Athenian temperament. The wit and resourcefulness of the Greeks were wanting. Instead, the individual Roman was dutiful and energetic and willing to submit his will to that of the state officials, this submission being accompanied by a corresponding individualism in private life. The law-bound system in which he lived coupled with the dogmatism engendered by his private life, shackled the Roman imagination, and the effects can be traced throughout Roman religious architecture.

The Athenian temperament was possible in a small city-state, but the Romans felt that, if their state was to survive, their citizens could not be limited to the 20,000 freemen of a Greek city-state. Even in Republican times there was an unconscious preparation for the domination of the Mediterranean area. Until the first century B.C., Rome was an agricultural community and the typical Roman was a peasant farmer. But as trade developed and material wealth increased, the typical Roman became an organiser, and as an organiser he dwelt in towns. Rome grew by admitting allies and subject people to her citizenship. When the citizenship was large enough to enable Rome to attempt the conquest of the Mediterranean world, the change from the republican to an imperial system of government was inaugurated.

The same business-like quality characterised Roman religion. The Romans never troubled to develop a mythology. Instead they borrowed their mythology from Greece. "Without the gods society would become a *magna confusio*." Jove, the protector of the city, Vesta, the personification of the everlasting hearth fire, and the all-seeing Sky God who gave the sanction of Heaven to an oath, were regarded as valuable civic possessions. The right to their protection was among the privileges which Roman citizenship assured. Piety to the gods and obedience to the magistrates alike were civic duties. Naturally, the Roman House of God lacked originality and emotional grip. At first, it was municipal; it ended by becoming imperial in characteristics, ornate, and satisfying but business-like.

In Republican times, the religious architecture of Rome differed little from that of Greece, except that it was less sure in its craftsmanship and less logical in its expression of the ideas enshrined. As in Greece, a Roman temple was built upon a raised platform and each temple had a columnar portico. Often it was surrounded by a colonnade, though frequently the columns were only semi-detached from the *cella* wall. The two or three steps which formed the stylobate of a Greek temple tended to become a lofty podium of concrete in Roman architecture and the Roman *cella* was wider and shorter than that of Greece. The altar was placed outside in a court, surrounded by covered porticoes. In general, the Maison Carrée at Nîmes, the temples in the Roman Forum, and the ruins at Palmyra, Baalbec, Petra and elsewhere, give an impression of the Greek style with something less than the Greek understanding of the basic principles of lintel architecture. Perhaps the most charming are the round temples, such as that dedicated to Vesta at Tivoli. Built about 100 B.C., from stone-faced concrete, the *cella* is 24 feet in diameter and is surrounded by eighteen Corinthian columns, each 23 feet 6 inches high. Set upon a lofty *podium* at the

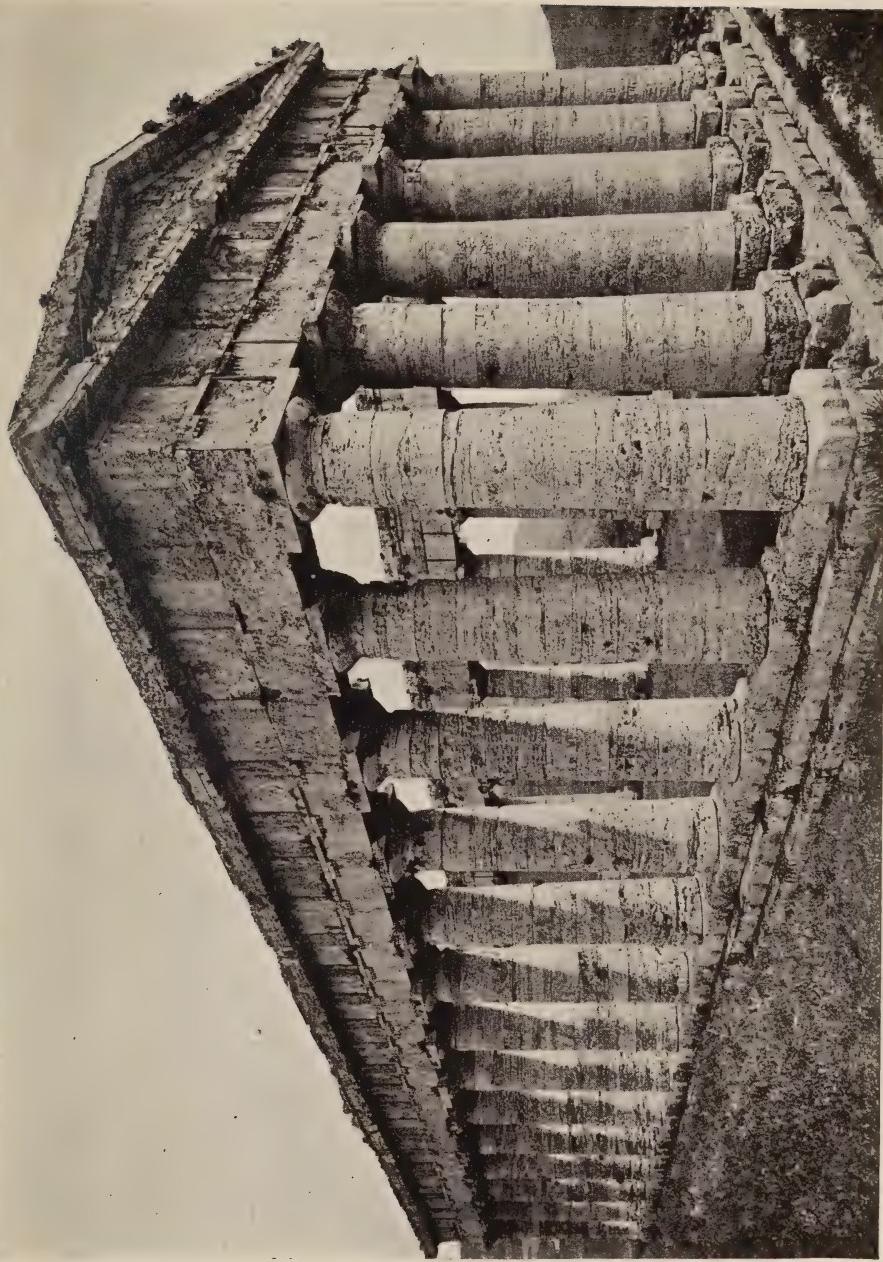
edge of a rocky eminence, the temple of Vesta at Tivoli is a delightful example of what the Greco-Roman architects could achieve, though it owes its fame as much to the beauty of its situation as to its innate grace.

With the establishment of the empire, the Greek invasion became complete. Eighty-two temples were restored by Augustus in the Greco-Roman style, the emperor boasting that he had changed Rome from a town of bricks to a city of marble. The Carrara quarries, which were first worked about 100 B.C., provided much of the material. Where marble was too costly, the walls were built of masonry, covered with a thin plaster and painted. Carved columns and statuary were imported freely from Greece. After Marcellus, Flaminius, Mummius, Sulla, and other Roman conquerors had done their worst, the Greek statues in the streets and temples of Rome were so numerous that it was said that the city had two populations, one of flesh and blood, the other of marble and bronze. The temple of Concord in the Forum was famous as an art gallery; so was the temple of Mars the Avenger, raised by Augustus in memory of the victory over Brutus and Cassius at Philippi. Augustan Rome was the last Hellenistic centre, and the successor of Antioch, Pergamus, Rhodes and Alexandria.

The debt of religious architecture to Rome is misjudged if the Greco-Roman temples are regarded as the only contribution of the Roman builders. Far more typical of Rome the Organiser are the domed buildings, in particular the Pantheon, one of the outstanding inventions in world art and Roman from the porphyry pavement to the central "eye." The Pantheon seems, originally, to have been the *calidarium*, or hot air chamber, of a public bath. Later it was consecrated as a temple, Pope Boniface IV. making it a Christian church in A.D. 608. To commemorate the dedication Boniface instituted the festival of All Saints. The portico, as the inscription on the frieze records, was built by Marcus Agrippa in 27 B.C., but the circular church dates from the reign of Hadrian (A.D. 120). The portico consists of sixteen columns of Egyptian granite, with capitals carved from Pentelic marble, each column being a single block 46½ feet high. The interior rotunda is 142 feet in diameter and 142 feet high and the recesses in the walls were once filled with statues of the gods who made up the mythical ancestors of the Gens Julia, among them Venus, Mars and Julius Cæsar. At one time the rotunda was beautified with columns of marble and the walls were faced with porphyry, alabaster and agate. The tympana and capitals of the pillars, as well as the interior of the dome, were lined with Syracusan bronze. To-day, this ornamentation has gone, so that the outstanding beauty of the Pantheon is its lighting. The sunlight, filtering through a 30-feet opening in the roof, has a mysterious charm which defies explanation, though it is in part derived from the sense of unity which it gives to the circular building, a unity which is emphasised by the vast dome.

Half the height of the Pantheon is wall and half dome, but the division between the drum and the dome is so slight that the illusion suggested is that the dome is continuous from the floor level. The dome is deeply coffered and the square panels used to be enriched by painted and gilded

THE TEMPLE AT SEGESTA



THE TEMPLE AREA, JERUSALEM : THE MOSQUE OF OMAR



mouldings. The play of light and shade in the deep cofferings fully compensates for the loss of the original decoration.

There is little certainty regarding the historical origin of the great dome of the Pantheon. The Buddhist *stupas* were solid like the Pyramids, and their dome-like form was not a matter of construction but of appearance. It has been suggested that the dome form originated from a mud roof, covering granaries, and that this, in turn, was a development from the primitive mud hut into which light came by the same opening in the roof which let out the smoke. But the suggestion at the most accounts for the form of the Roman dome and not for the organising ability and technical skill which built it. There had been domes in Egypt, Assyria and Mycenæan Greece, but they were on a small scale, and generally in connection with tombs, dwelling-houses or granaries. In the Pantheon, the dome was enlarged "to the scale of sublimity," and it is in this sublime scale that the religious significance of the Roman dome lies.

In many cases the Roman dome seems to have been built upon a framework of wood, which held a mass of mortar several feet in thickness, while the binding material was drying. In this respect the Roman dome differed markedly from the domes of Renaissance times, inasmuch as it was really a massive lid of concrete which was set upon thick walls, light being introduced by leaving a hole in the centre of the concrete lid. The dome of the Pantheon has this monolithic character, though it is built of bricks, laid in courses, a method which did away with the necessity for the elaborate temporary framework required when concrete alone was used. The wall of the Pantheon was made of tufa concrete and brick, and the chambers and galleries within it were such that Professor Adler has estimated that only half the material was used which would have been necessary had the drum been solid. The dome, apart from its brick ribs, is largely composed of pumice stone and pozzolana, a volcanic earth which, mixed with lime, forms a hard cement, rendering the dome practically monolithic and thus doing away with lateral thrust, the structural problem which was to trouble the builders of Romanesque vaults and Renaissance domes in later ages.

The Pantheon is beautiful and original in a high degree. But behind its sublime unity and brooding loveliness lies the wonder of the engineering skill of the Roman builders to which its invention testifies. This is the organisation which the Romans added to the artistic insight of the Greeks. Thanks to Rome, architecture was fitted for many purposes which had not arisen earlier. Great public halls, baths, club-houses, theatres, aqueducts, triumphal arches, palaces were set up, not in Rome only, but throughout the Roman empire. Whereas earlier peoples had developed architecture in this direction or that, Rome made the art so general that, to this day, we owe more to her example and practice than to those of any other nation. The Roman architect had a much larger choice of building material than the Greek. Apart from the marbles of Carrara, there were travertine, a hard limestone from the Tivoli district, volcanic tufa, peperino and pozzolana, a sandy earth

which mixed with lime formed a concrete of remarkable durability and hardness. Walls and domes were largely made of this cement and faced with alabaster, porphyry or slabs of marble. The use of cement for walls and domes dates from about the first century B.C., and gave Rome the Organiser its supreme architectural opportunity. Skilled labour had been essential for working the stone and marbles used in a Greek temple, but was relatively unimportant in concrete work. One of the merits of concrete is that it is a constructional method which does not call for high craft, as did the Greek lintel construction with marble. Whereas the Greek method required skilled masons, the Roman method of building with concrete could be safely carried on by unskilled labour under the direction of overseers. Gangs of slaves, freemen subject to occasional labour levies and criminals could thus be employed.

The master masons, as well as the humbler craftsmen, were organised in *sodalitia* or *collegia*. These industrial colleges were of great antiquity and they resembled the friendly societies of to-day. Members met in their guildhall or at the temple of their patron God, and there were gatherings to commemorate the death of members. A certain seller of ointment at Montferrat left his garden in trust that the members of his college might assemble for an annual feast upon his birthday, adding a request that roses should be laid upon his grave for ever. The entrance fee of a college was, perhaps, 100 sesterces,* together with a flagon of sound wine and a monthly subscription of five "asses." In return a funeral grant was made to the member's heirs, or the society itself arranged for the burial. The larger societies had burial grounds or a columbarium of their own, with a mortuary chapel where members met on anniversary days. The heads of the societies bore such titles as *magistri*, *curatores*, *præfecti*, *præsides*, and *quæstores*, the latter managing the trust monies of the society. In a college of smiths at Tarracensis, fifteen names appear at the head of the roll as patrons. These patrons at times built a clubroom or *schola* for their members or, maybe, a chapel in honour of the patron deity of the guild.

As on the engineering, so on the æsthetic side, Roman architecture has the qualities of its imperial origin. Lavish in decoration, it lacks refinement; if it has the characteristics of vast extent and immense mass, it also displays a carelessness in finish which goes with a non-critical mind. The Roman builder found nothing incongruous in using the Greek orders in a purely decorative manner, to adorn buildings in which an arch or vault of brick or concrete was the real constructional factor. Whereas the Greeks used the columns to support the beam-like entablature, in Roman architecture the column was rather a decorative addition than a structural necessity. The designers of the Colosseum used all the Greek "orders" in a single building, Doric on the lowest storey, Ionic on the second, Corinthian on the third, and against the top wall they set a row of flat Corinthian pilasters. Always the Corinthian order was more popular than the solemn Doric or the graceful Ionic *ordo*—and even the ornate Corinthian capital was crowded with pretty detail which extended to the entablature above. The contrast with the

* About 16s. 8d. of our money.

unornamented surfaces which the Greeks had sought was lost. Instead of building the column by a series of drums as the Greek builders had done, the Romans preferred the more spectacular method of using a single stone for the shaft. In the great baths, the Roman builder showed so little understanding of the function of a column that he not only used it to support the vault of a domed hall, but actually added the entablature to the column. His logical insight was so defective that he could not see that the vault itself was the superstructure which the columns had to carry. Instead, he inserted a slice of architrave, frieze and cornice above the column, and from this he allowed his vault to spring.

It is folly to carp at the Roman builder. What he wanted was a large and unencumbered floor space, and the methods of lintel architecture would not give this. Accordingly he raised his buildings upon massive piers with arches above, to carry the dome or roof. It was not until Diocletian built his palace at Spalato that the Roman column was given the specific task of supporting an arch. Admit that we must search in vain in Roman architecture for the attributes which are specifically æsthetic ; nevertheless, the devices of the Roman builders and engineers were used by all later ages who were faced with similar problems. Rome the Organiser needs no loftier tribute. If we would judge the Roman builder as he would elect to be judged, and as he has a right to be judged, we must recall not the Greco-Roman temples alone, but all of Rome, when the empire was at its mightiest.

Carrying back the imagination, we will take our stand on the twin heights of the Capitoline Hill, say on the broad platform upon which the temple of Jove was set. Nearby is the temple of Juno. It is a summer evening, early in the third century after Christ. With the setting sun at our backs we look down upon the crowded Forum. Immediately below, at the head of the narrow valley, about 36 feet above the level of the Forum, is the Tabularium, an open corridor with an arcade fronting the Forum, and above, a gallery with Ionic columns. In the cells behind the gallery are stored the brass tablets, inscribed with the public records of the republic and empire. Originally a flight of steps led from the Forum to the top of the Capitoline, and passed through the Tabularium ; the steps were closed when the Temple of Vespasian was built. Three Corinthian columns of Carrara marble from the east corner of the portico, recall the temple of Vespasian to-day. On the right is the temple of Saturn, with its eight columns, the Ionic portico still retaining an architrave inscribed *Senatus Populusque Romanus Incendio Consumptum Restituit*. The Temple of Saturn was the earliest treasury of the Roman people. A flight of marble steps, resting upon massive blocks of travertine, led to the treasury chamber. Nearby is the Milliarium Aureum, a milestone sheathed in gilded bronze, upon which are inscribed the distances of the principal towns of Italy from the capital. Here is the Cornhill of Rome. From the platform of the Temple of Jove we are looking into the very heart of Roman life and history. To the right of the Forum is the low line of the Palatine Hill ; to the left the Forum of Augustus and, beyond, the Forum of Trajan,

with the great column of the emperor. Passing around the temple platform, the broad stream of the Yellow Tiber claims attention with its wharves, its bridges and its gates. The hill of the Janiculum rises beyond the river, with the theatre, baths and hippodrome of Nero's pleasure gardens. Recrossing the river, the Campus Martius can be seen with its theatres, temples, baths, porticoes, promenades and shops. The baths were a combination of common baths and the Greek gymnasia, their usual form being a large quadrangle, the sides of which were formed by various porticoes and outbuildings, the interiors being elaborately decorated with stucco, mosaics and marbles. The baths of Diocletian were built between 302 and 305 A.D., by 40,000 Christians, and were upwards of a mile in circumference. Twelve hundred years later, Michelangelo built the church of Santa Maria degli Angeli from the ruins of Diocletian's *tepidarium*. The circular church of St. Bernardo was built from another hall in the great baths.

Circling the temple platform, our gaze returns to the Forum Romanum. Through the centre winds the Sacred Way, leading eventually to the Circus Maximus on the other side of the Palatine Hill. The Sacred Way is the path of the semi-civic processions, which made up so much of Roman religion. Beyond the temples at the foot of the Capitoline Hill, and in front of the Tabularium, stands the temple of Concord, built by Camillus to commemorate the reconciliation of the Patricians and Plebeians in 367 B.C. The *cella* of the temple was, at times, a meeting place for the Senate, and it was here that Cicero denounced the conspiracy of Catiline. In front of the Temple is the Rostra Julia, a platform adorned with a balustrade and statues, where Antony thrice presented Cæsar with the "kingly crown which he did thrice refuse." The actual Senate House is the building to the left of the Forum, raised on a platform and approached by steps. In Christian times the Senate House was consecrated by Pope Honorius (625) in memory of the martyr, St. Hadrian, who had died 300 years earlier in Nicomedia. Honorius added two rows of columns and an apse, converting the parliament house into a Christian church. In front of the Senate House are the Comitium and, beyond, the Argiletum, a booksellers' quarter, where Martial recommended patrons to buy his poems. Nearby is the Basilica Æmilia, a great rectangular hall divided by two colonnades of carved Corinthian columns. On the other side of the open square, facing the Basilica Æmilia, is the Basilica Julia, a court of law, open to the sky in the middle, but surrounded by a double colonnade. At the north end is a low screen which shuts off the space given over to the Judges and the advocates. These basilicas have a special interest, as they were the architectural prototypes of some of the early Christian churches. In the Forum, too, are several dedicatory arches and columns, among them the Arch of Severus, dedicated in 203 in memory of the Parthian victories, and decorated with reliefs picturing the passage of the Euphrates and the entry of Severus into Babylon. The Arch of Titus commemorates the conquest of Jerusalem in A.D. 70. Originally, it stood to the south of the Forum, but was moved by Hadrian to make room for the Temple of Venus and Roma. This great double temple was built about A.D. 125,

upon a platform extending from the Via Sacra to the Colosseum. The two *cellæ*, with semi-circular apses, are placed back to back and are surrounded by a colonnade of seventy-two columns. Within is the altar at which every newly-married couple in Rome offers sacrifice. For the rest, there is the temple built by Augustus to the genius of Julius Cæsar, and the Regia, where the colleges of the *pontifices* and *flamines* were housed. To-day, this part of the Forum is distinguished by the three columns of the Temple of Castor and Pollux, rebuilt by Augustus, but recalling the aid given by the gods during the battle of Lake Regillus, 500 years earlier. The space between the Temple of Castor and that of Julius was used for public meetings in republican times, and the terrace of the Temple of Castor and Pollux served as a platform for orators.

And Rome, be it remembered, was only a metropolis from which radiated the energy and organisation which set up similar temples, memorials and public buildings throughout the far-flung Empire. Every large town in the Roman world had its forum and its temples to Jupiter, Apollo, Bacchus, or another of the divinities which crowded into the Roman religious system as the empire extended. When the Emperor Aurelian captured Palmyra, the capital of the courageous Arab queen, Zenobia, he gave 300 pounds weight of gold and 1,800 pounds weight of silver for the repair of the Temple of the Sun. While the Romans and Persians were struggling for mastery in the middle east, the townsfolk of Palmyra took toll of the trade which passed along the desert between Mesopotamia and Syria until their city took to itself a measure of the grandeur that was Rome. Indeed, the wealth and power of Palmyra finally aroused the jealousy of Rome and the city was captured in A.D. 273. To-day the ruins are unrivalled in extent, and the emotion they arouse is increased by the desolation of the sand drifts in which they lie, testifying as they do to the glories which passed so inevitably to Rome the Organiser.

These Syrian temples were not built in honour of Roman gods, but to deities who derived some of their characteristics from local religious cults of Eastern and Greek origin. But they are none the less Roman on this account. Rome was an organising power and influenced, or was influenced by all the art or thought which came within her purview. Some interesting Palmyrene religious frescoes have been found in the chapel of a Palmyrene garrison at Dura-Europos, dating from A.D. 100 to 300, which throw light upon ritual belief in these border provinces of Rome. An early fresco shows a scene of sacrifice in which a white-robed priest plunges a reed into a vase filled with water from the Euphrates, while the other sprinkles incense on an altar-fire. A later fresco shows the Roman tribune, Julius Terentius, in command of a cohort of Palmyrene soldiers, throwing incense upon the flames on an altar, behind which is the standard of the cohort. On pedestals are statues of Palmyrene gods in Roman uniform. The frescoes are interesting examples of a form of temple decoration which was general throughout the Roman world, but of which few examples remain.

Less extensive and massive than the ruins of Palmyra, but even more excellent in craftsmanship, are the ruins of Baalbek, another desert

trading city, between Lebanon and the anti-Lebanon hills. Here, too, the chief temple was not dedicated to a Roman deity, but to a conjunction of Greco-Roman and Syrian faiths, Jupiter-Baal. It consisted of a portico, a six-sided courtyard with covered recesses, a vast quadrangle, and the rectangular *cella* beyond. The temple of Bacchus at Baalbek is smaller, but a characteristic example of what the power and wealth of Rome could do before the German incursions brought about the collapse of the imperial system. Some of the building-stones used at Baalbek are 60 feet long, and in the neighbouring quarry is a hewn block 77 feet long, 15 feet high and 14 feet broad, weighing 820 tons. The energy and organising power which Rome could devote to religious architecture may also be seen at Petra, the treasure-city of the Nabateans in the desert of Edom, where the temples and shrines are carved from a cliff of red sandstone. Here the facade of the temple of Ed Deir is 147 feet wide and 138 feet high, with columns, entablatures and pediments cut from the living rock—a glorious folly. Perhaps the folly was not Roman, certainly not entirely Roman. But like other achievements of the Mediterranean world during the centuries when Rome ruled, it came to Rome in the end, and must not be forgotten when the products of Roman organisation are in question.

The basis of the organising power of Rome was the supply of capable administrators which the social and political system assured the republic and early empire. After the second century, the men who had furnished the organising talent in earlier times tended to abandon themselves to lives of luxury, so that power was concentrated in a relatively few men of vigour and ability, a tendency which was only checked by the rise of a bureaucracy under Diocletian and Constantine. An effete political system tended to destroy the pagan faith with which it was associated and brought Christianity nearer as a national religion. The barbarian incursions in the third and fourth centuries hastened the process. In A.D. 312, Rome still held the frontiers of the Rhine, the Danube and the Euphrates, and the Germanic tribes were confined within their northern forests and marshes. Yet, at this very time, the Roman builder embarked upon a new effort, and one which was to result in the House of God, towards which humanity had been instinctively moving since man first listened to the thunder and whispered "The god is angry." Within 250 years the empire which centred upon Rome had come to an end, and German kingdoms were established not only in Italy but in Africa, Spain, France and Britain. But already the movement was in being which gave to Christendom the early basilicas, the Romanesque and Gothic cathedrals and churches, St. Peter's at Rome, Wren's church of St. Paul, and Liverpool cathedral in our own day. Henceforward, the development of the House of God is a continuous story, in which the strands of history, faith and craft are interwoven into a unity of ever-growing beauty and significance.

CHAPTER V

THE COMING OF CHRISTIANITY

So we pass from the pagan shrine to the Christian House of God. Long before the incursion of the German tribes, certain Roman thinkers had forsaken the ideas inherent in polytheism, though polytheism still lingered on as the national religion of the Roman Empire. The grammarian, Maximus, was only one among many who reached the conclusion of Abul-Fazl, the Vizier of Akbar, that the true God is praised in every tongue and by all people. Writing to Augustine, Maximus said :

“ Who then is so foolish and crazed as to deny the absolute certainty of a One and Only God, without beginning, without natural offspring, the great and glorious Father ? Whose forces scattered throughout the world we invoke under many names, since His real name is unknown to all, for God is a name common to all religions. So doth it come to pass that while invoking the parts singly, piecewise, separately, we manifestly worship the Whole.”

The Augustan “ pax ” at the time of Christ’s birth made the Roman world ready for a religion which could be accepted by the various races and classes under the rule of the Emperors. The seas were open and the great state highways assisted the passage of ideas, while the Greek language ensured a speedy sifting of thought. Christianity was quick to benefit by the organisation of Rome, and when the gospel message spread through Asia Minor and Greece to Rome itself, the problem of the Christian House of God became important. First the dogma and its essential ritual must be understood, and then the means by which it found expression in architecture, sculpture, and wall painting. As the task of Christianity was to restate the truths of the Greco-Roman philosophers and the teachings of Eastern mysticism in terms of personality, that the union of the individual man and his Creator might seem possible, so the task of the Christian architect was to create a meeting place in which the mystic mood should not clash unduly with the elements which recalled the humanity of the worshipper.

It was Paul, a Romanised Greek of Tarsus in Asia Minor, who found in Christianity a religion fitted for the Roman world. He visualised the idea of the God-Man, allied with the organisation of Rome and the philosophic artistry of the Greeks. In St. Paul’s later epistles we see God’s eternal plan realised through the agency of Christ by the reunion of redeemed humanity with God himself. This union between life temporal and life eternal is the outstanding strength of Christianity, as it was to be the supreme significance of Gothic architecture and

sculpture. The Jews had been familiar with the conception of an extra-mundane God working from time to time through certain members of the human family. They even reached the conception of a Messiah, the human incarnation of this far-distant Godhead. But the unity of the human and the divine through this Messiah was only accepted by the Roman world when the subtle philosophy of the Greek was added to the vision of the Jew. At first Christianity had more than one rival. It had to struggle not only with the cult of Osiris and the cult of Mithras, which had arisen from the sun-worship of Persia, but other Eastern religions. Humanly speaking, it was as a new mystery religion, rather than as the Jewish faith in Jehovah, that Christianity spread through the Roman world when Greco-Roman polytheism proved inadequate for the realm of the Cæsars.

To the theologian Paul must be added the poet who wrote the Fourth Gospel. To St. John was vouchsafed the truth that the Spirit of Love and the Spirit of Truth are not two but one. Only those who love can really know. It was because Christianity led to adoring love, joyous confidence, and exaltation of the spirit, that it proved an inspiration for church builders such as the Roman Empire had never known before. Christianity reached the hearts of the Roman people, and particularly the hearts of the Roman women and children.

The conception of the all-loving Christ as the redeemer of fallen humanity vitalised western architecture for 1,500 years. Indeed it vitalised practically all western art and thought. The philosophy of Thomas Aquinas, the poems on the Holy Grail, the Little Flowers of St. Francis, the "Stabat Mater," the hymn which tells of the Seven Sorrows of the Virgin, are among the glories of Christian art which arose from constant meditation upon the mystery of Christ's life and death. Above all, there is the Sacrament of the Mass, which has so profoundly influenced the buildings in which the people of Christendom meet for prayer and praise.

Tertullian, writing as a Christian theologian about A.D. 200, described the place where the Sacrament of the Mass was celebrated as the "Theatre of the Pious." Accepting the vivid phrase, the Greek orchestra became the Christian choir, the *skene* or tent behind being the priests' vestry. Whereas the orchestra had been circular because the primal rite in Greece was a dance around an altar, the Christian Church developed a form suitable to the ritual of the Mass. At first, there was no division in a Christian Church between the actors in the sacred mystery and the congregation. The early apostles were only leaders in a rite. As the ritual increased in complexity, a place for the actors in the Christian sacrament was evolved, apart from the congregation and even from the singers who represented the Greek chorus. As the Greek drama had been an effort to recover the emotion arising from the fabled histories of tribal demi-gods, so the Mass was a synthesis of the story of Christ's passion, ever keeping in mind the life and message of the Christ. The faith inspiring the Christian architect did not differ from that of the celebrant at the high altar. As a mystic union with the invisible Trinity was achieved through the Sacrifice of the Mass, so

the architect, the painter, the sculptor and the goldsmith worked together to make the Christian ritual real for all who gathered within the four walls of a church. Hegel, in the *Aesthetic*, emphasised an abiding characteristic of religious architecture when he wrote that the building is only an environment of the image of the god. It does not possess its spiritual content in itself, but through another thing. Hegel added : architecture levels a space and builds a fit place for the concentration of Spirit. Into this temple the God enters in the lightning flash of individuality which smites its way into the inert mass. With religious sculpture the Infinite takes form.

This was the architectural ideal, though centuries were to pass before the cathedrals and monastic churches were fashioned for the perfect rendering of Christian ritual and thus achieved the unity of thought, emotion and expression which characterises truly great art. Both the rites and the church in which the rites were performed were made perfect by men who knew because they also loved, and so won the purity of vision which is the privilege of deeply loving souls. In Christian architecture, this spiritual insight was analogous to the science in Greek temple-building and it is deeply interesting to trace the steps by which the Christian vision fashioned the greater Gothic cathedrals and churches, as Greek science had fashioned the Doric temple.

At first advance was slow. Christian communities were numerous but relatively small and scattered widely throughout the Roman world. Christian architecture made little advance while the meeting-place was the house of one of the wealthier converts, as was common during the first three centuries after Christ. The first chantry was a domestic chamber, used for the breaking of bread and the drinking of wine. In the New Testament we read of "The church in the house of Chloe." The house of the Senator Pudens in Rome, where St. Peter was reputed to have lodged, became the Church of St. Pudenziana, a daughter of Pudens. It is reputed to have been consecrated by Pius I. in A.D. 145, and in early times was the cathedral of the Christian city. Where stood the house of St. Clement, the third bishop of Rome, arose the Church of San Clemente, the oratory built by Clement on the Esquiline Hill being rebuilt as a basilica after Constantine. Under the church of the fourth century may still be found traces of a Roman house of the Imperial period, in which one chamber served as a holy shrine and was arranged as an oratory. Nearby is a room roughly fashioned into the semblance of a cave for the celebration of the rites of Mithras. The Christian and pagan shrines below the church of San Clemente were not used at one and the same time. Probably Mithras was an intruder into the Christian home and was expelled when Christianity triumphed under Constantine.

The house of a well-to-do Roman was readily adapted to a Christian service. The colonnaded open court with its *impluvium* served as a place of baptism ; later it became the *atrium* of a basilican church, the open court with its colonnaded arcade being in course of time transferred from the front to the side of a church, when it became the cloisters of a mediæval minster. The house under Santa Maria Antiqua, excavated in

1900 near the Roman Forum, may be compared with San Clemente. In Hadrian's time it was a typical Roman dwelling house. By the sixth century it had been transformed into a church by converting the vestibule into a *narthex* in front of the *atrium*, while an apse was hallowed out from the brickwork of the *tablinum*.

The private meeting halls of the industrial colleges, at times, were also used as Christian assembly places in Roman towns. A *schola* as a rule possessed a memorial chapel in which was an apse where members of the fraternity were buried. Dr. Baldwin Brown, in his *From Schola to Cathedral*, has demonstrated the importance of the *schola* in the development of the basilica church of early mediæval times. If the taking of refreshment in a private house suggested the *agape* or "feast of charity," so did the hall of the *schola*, in which the fraternity dined and shared the memorial bread and wine in recollection of dead comrades. "The feast of charity" had a special significance as the festival in memory of dead friends. The will of a pagan Roman provided that a *cella* should be built, with an alcove containing a statue of the dead man in marble. Under the alcove was to be set a couch with two marble seats and here a feast was to be held on the birthday of the dead, the celebrations including the issue of festal garments, cushions and rugs. In the Acts of Martyrdom of St. Polycarp (A.D. 155) may be found a further reference to the "feast of charity" in early Christian custom. "We took up his bones, more precious than costly jewels, and more highly approved than tried gold, and laid them in a fitting place, where, so far as possible, the Lord will grant us to assemble together with rejoicing and praise to celebrate the birthday of his martyrdom, both in remembrance of those who have fought the fight and for the practice and preparation of those whose time is coming."

As has been said, the dominant conception in Catholic ritual is the altar as the Hill of Calvary, the altar as the place where the Supreme Sacrifice is renewed daily in obedience to the ordinance of Jesus himself. If the ritual of the Mass had profound effects upon Christian architecture, the plan of the Christian Church was also evolved under the guidance of the fact that apostles, saints and martyrs often found a resting place near the high altar of a church. From very early times, Christians have sought to associate their saints and martyrs with the central mystery of their faith. Tertullian had said : "The blood of the martyrs is the seed of the Church." It was natural that the relics of those who had died for the Faith should be enshrined beneath the altar whereon the Supreme Sacrifice was daily renewed, *per sacramentum*, and equally natural that architects, sculptors and decorators should not be forgetful of those who were laid to rest near the high altar. When the Edict of Milan established Christianity throughout the Roman Empire in A.D. 313, many churches were built above the burial places of martyrs.

The early Christians did not burn their dead. They preferred to inter them after the Jewish manner in the garden of some wealthy member of the community. This was "the hospitality of the tomb." There was first an original family tomb ; later, corridors were cut in the tufa and

fitted with narrow shelves upon which the dead were placed, the body being sealed in with plaster, or a slab of marble, inscribed with such a phrase as "She Sleeps," or "He Went to God." At times, a section of the underground crypt was hung with lamps and used as a chapel, or a small oratory was raised above the entrance. St. Peter's, at Rome, stands on the site of the cemetery of the Vatican; St. Paul's stands over the catacomb of St. Lucina; San Lorenzo over those of St. Hippolytus and St. Cyriaca.

This custom gained the highest authority when Constantine built a church above the Holy Sepulchre and made Jerusalem the place of Christian pilgrimage, which it remained for a thousand years. Zenobius, the architect employed by Constantine, built the Anastasis, or Sanctuary of the Resurrection. About the same time, Constantine caused a great basilica, the Martyrium, to be built behind the Sanctuary of the Cross, this being a great courtyard surrounded by cloisters, in which the True Cross was shown to those who were making pilgrimage. A trefoil-ended church was also built above the Cave of the Birthplace at Bethlehem. In these buildings were enacted the beautiful memorial ritual described by Eucheria, a cousin of the Emperor Theodosius, who made a pilgrimage to Jerusalem about A.D. 385 and wrote an account of her journey to the Sisters of her "religious-house" at Etheria, in Spain. The *Peregrinatio Etheriae* is included in Mgr. Duchesne's *Christian Worship*. The purposes served by a House of God in the century after Constantine cannot be studied more conveniently than in the travel-diary of Eucheria, which narrates in detail the daily services as well as the special ritual followed during Lent and Easter-tide. The original church of the Holy Sepulchre seems to have included a small dome supported upon a ring of twelve columns, the columns representing the twelve apostles. The form was repeated in the well-known Church of Sant' Apollinare Nuovo at Ravenna. The *motif* of the twelve columns upholding a church is found again and again in Christian architecture, notably in Sainte Chapelle, Paris. The present church of the Holy Sepulchre at Jerusalem was built by the Emperor Constantine Monarchus, who raised a circular church above the tomb of Christ about 1040. When the Crusaders, in 1099, added a chancel to the circular church, the form familiar in the church of the Knights Templar in London was complete. There are similar circular churches, derived from Constantine's church of the Holy Sepulchre, at Cambridge, Northampton, and Little Maplestead.

For all their beauty, circular domed buildings would seem to be ill-fitted for Christian worship, at any rate as it developed in Western Europe, if only because they offered no natural place for the altar and no natural divisions for keeping the various elements in the congregation apart from each other, and from the officiating priests and the choir. A new type of building had to be devised, based upon and yet differing from anything known in earlier architecture. In Italy, during the fourth and fifth centuries A.D., the basilica form proved to have conveniences for Christian worship. The basilica was a rectangular building supported by four walls and divided by two rows of columns into a central nave

and two side aisles, the nave being higher than the side aisles. The only departure from the simple rectangular design was a small semi-circular apse, which held the Holy Table, the main doorway being at the opposite end of the church, usually flanked by smaller doorways leading to the aisles. In the outer court stood a fountain under a baldachino in which worshippers washed their hands and lips before entering. This was the *cantharus*. At times the outer court (*atrium*) was colonnaded, but it was often reduced to a narrow portico across the end of the church forming the *narthex*, as the entrance portico was called in the Eastern Empire. The Baptistry was usually a small domed building apart from the church containing the *piscina*, or tank, for immersion. As this could not conveniently be placed in the church, separate octagonal or circular buildings were constructed, the *piscina* being sunk in the floor. The practice of separate baptisteries continued until the seventh century, when the font was placed in the portico of the church.

Within the church the apse was reserved for the officiating priest and the elders who sat on the stone benches around the circular head of the church, the apse being surrounded by an "arch of triumph" and reached by a flight of steps. The bishops' chair, or *cathedra*, occupied the middle of the apse, facing the table-shaped altar which was covered by a permanent canopy supported on marble columns, the *ciborium*. At St. Peter's, Rome, this system is still followed. The Pope's throne is in the apse and he recites the Mass at the High Altar, under Bernini's baldachino, facing the congregation. In general, however, the altar occupies the place the bishop's throne once had. Beneath the altar of the early basilica was an excavation for relics or a sarcophagus. In front of the altar, separating it from the nave, were low marble screens, *cancelli* (the word gives us our "chancel"), the enclosed space being reserved for the clergy. At the head of the nave was a reserved space for the choir, this space being also railed in by *cancelli*. Within the nave, too, on either side of the nave screen, were two stone pulpits (*ambones*) used for reading the Gospel and the Epistle. An *ambo* was also used for the sermon, if this was not given from the apse. The congregation thus occupied the aisles, the men being on the south side and the women on the north. The back of the nave was reserved for catechumens who had not been baptised, while penitents were confined to the portico. If the women in the congregation more than filled their aisle, they used the upper gallery or *triforium*. Illumination in a basilica came from the pierced stone slabs in the clerestory and gave a beautifully mellow and diffused light. The floor was decorated with marble mosaic of the familiar Roman type, and the blank wall spaces above the columns of the nave were covered with mosaics picturing familiar Bible stories. The rounded apse was decorated with scenes showing our Lord in glory, surrounded by the saints and martyrs, indicative of the life to come.

A description of an early Christian service, quoted by Baldwin Brown from the Apostolical Constitutions II. 57 (translated in the Ante-Nicene Library, Vol. XVII.), suggests the problems before an early Christian architect when designing a meeting place fitted for Christian ritual.

" Let the house of assembly be long in shape and turned towards the East, with its vestries on each side at the eastern (entrance) end, after the manner of a ship. Let the throne of the bishop be placed in the midst and on each side of him let the presbytery sit down, while the deacons stand beside with closely girt garments, for they are like the sailors and managers of the ship. In accordance with their arrangement, let the laity sit on the one side with all quietness and good order, and let the women too be in a place apart and sit in order, keeping silence. . . . Let the porters stand at the entrances of the men and give heed to them, while the deacons stand at those of the women, like shipmen . . . and if anyone is found sitting in the wrong place let him be rebuked by the deacon as manager of the foreship and removed into the place proper for him, for the church is not only like a ship but also like a sheepfold and as the shepherds place all the brute creatures distinctly . . . so it is to be in the assembly. Let the young men sit by themselves, if there be a place for them, but if not let them stand upright, but let those already advanced in years sit in order and let the children stand beside their mothers and fathers. Let the younger women also sit apart if there be a place for them and if not let them stand behind the elder women. Let those women who are married and have children be placed by themselves, while the virgins and the widows and the elder women stand and sit before all the rest and let the deacon be the disposer of the places that everyone that comes in may go to his proper place and not sit at the entrance. . . . In like manner let the deacon oversee the people that nobody may whisper nor slumber nor laugh nor nod, for all ought in the church to stand wisely and soberly and attentively, having their attention fixed upon the word of the Lord. After this let all rise with one consent and looking towards the East, after the catechumens and penitents are gone out, pray to God eastward. . . . As to the deacons, after the prayer is over, let some of them attend upon the oblation of the eucharist, ministering to the Lord's body with fear. Let other of them watch the multitude and keep them silent. . . . (During the celebration). Let the door be watched, lest any unbeliever, or one not yet initiated, come in."

The basilica of San Lorenzo Fuori le Mura was built above the catacombs of St. Cyriaca by Constantine, and on this account is one of the seven pilgrimage churches of Rome. Under the High Altar, which is reserved for celebrations by the Pope, rest the bodies of St. Lawrence, St. Stephen and St. Justin. The church was enlarged in the fifth and sixth centuries and was rebuilt by Pope Honorius in the thirteenth, but many parts recall the basilica of early Christian days. The nave roof is supported by twenty-two Ionic columns, taken from classical buildings, as were the magnificent fluted columns in the choir, which belong to a rebuilding by Pelagius II. in 578. The ancient Papal Throne and the *ambones*, from which the gospel and epistle were chanted, are other early features. The apse of the original basilica was destroyed during the rebuilding in the thirteenth century but the mosaic upon

the face of the chancel arch dates from about A.D. 590. It pictures Pope Pelagius offering the church to the Saviour, who is surrounded by saints.

Other early basilican churches in Rome contain relics of classical art or craft. The church of Santa Pudenziana has fourteen ancient columns of grey marble and in St. John Lateran are the bronze doors from the Senate House in the Roman Forum. Here, too, may be seen a statue of Constantine from the Baths on the Quirinal. San Pietro in Vincoli, built in A.D. 442, contains twenty fluted Doric columns of Hymettian marble. The marble throne in the chancel was once in the podium of the Colosseum.

Before the outlook of the practical Roman associated itself with early Christian thought, Christian art was symbolic rather than representational. Being the religion of a small sect, with little opportunity for attracting proselytes, this was natural enough. Symbolism makes a special appeal to communities of initiates. They are flattered by its mysteries, for they alone have the knowledge. This early symbolism, however, has little in common with the art form for which we are searching, as may be seen by recalling a single example, the manifestation of the Deity, known as Abraxas, represented upon Gnostic amulets by a cock's head emblematic of the sun, a human body, two serpents instead of legs, and carrying a shield and whip in his hands. Gradually, the representational methods familiar throughout the Greco-Roman world were introduced into Christian usage, and figures from Bible story and church history became common, both in painting and sculpture.

It has been said that St. Peter's, Rome, and the basilica of St. Paul without the Walls were originally memorial *cellæ* of the martyrs. St. Peter's existed in the time of Pope Anacletus at the end of the first century. Above it Constantine built the basilica of St. Peter which was destroyed in the sixteenth century, when Michelangelo's church was put in its place. These are the terms of the donation of the site by Constantine, as set out in the life of Sylvester :—

“ At the same time Constantine Augustus made a basilica to blessed Peter the apostle, near the Temple of Apollo, the tomb with the body of St. Peter being thus covered over. The tomb itself he shut in on every side with Cyprian bronze, so that it was built up with masonry : at the head 5 feet, at the feet 5 feet, at the right side 5 feet, at the left 5 feet, beneath 5 feet and above 5 feet. Thus he enclosed the body of blessed Peter the apostle and covered it over. And he adorned the altar above with porphyry columns and other columns carved with vines which he brought from Greece. And he made an apse shining with plates of gold, and above the body of blessed Peter, above the bronze which enclosed it, he made a cross of purest gold weighing 150 pounds.”

For 1,100 years St. Peter's was the first church in Christendom and affected church planning in all parts of western Europe. It had a square *atrium*, a pillared nave with four aisles, an arch decorated with mosaic,

a transept and baptistery, an apse containing the high altar and the tomb of St. Peter, and, at the extreme western end, the papal throne. The honour of being the church of the Popes, however, belonged to St. John Lateran, owing to the fact that the Lateran Palace was the home of the Popes from the days of Constantine until 1308, when the palace was burnt and the popes left Rome for their long exile at Avignon. The Popes were crowned in St. John Lateran until 1870. The original basilica was part of the Palace of Fausta, Constantine's Queen, and contained statues of Our Lord and the twelve Apostles, each cast in silver and 5 feet in height. A second silver statue of Christ, also in silver, was set up in the apse. Four silver angels stood near by, with jewelled eyes and lances in hand. The great candelabrum before the altar had fifty golden lamps. Five hundred pounds of gold were used for lining the roof. Seven silver altars were disposed about the church. Unfortunately, though there are many historical memorials in the church, little of the original fabric remains. The Baptistry contains the font of green basalt in which Constantine is reputed to have been baptized. The cloisters, with a ninth-century well in the central garth, are of rare charm.

During the century after Constantine, Christian basilicas were built in all parts of Italy and, indeed, throughout the Roman world, none being more interesting than those which St. Ambrose built in Milan. The son of a Gaulish prefect, Ambrose was born at Treves in 340, and, in early manhood, became prefect in the Milan district. It chanced that the Arian bishop of Milan died and a contention arose regarding his successor. Ambrose was called in to decide between the followers of Arius and those who favoured the orthodox faith of Rome, and during the conclave a cry was raised, "Ambrose is Bishop." The young prefect fled from the gathering, appalled at the very idea of such an office, but he was brought back and instituted as bishop, though he had not even been baptized. As Bishop of Milan, Ambrose proved himself a great statesman, countering the Roman Emperor and Empress, when the secular aims ran counter to the interests of Christendom. The public penance which the Emperor Theodosius did at the instance of Ambrose was only less memorable than the triumph of Gregory VII. at Canossa 700 years later. Ambrose prided himself upon the beauty and magnificence of his services and was the first Churchman to introduce the chant into public worship. Apart from the foundation which later became Milan Cathedral, St. Ambrose built the basilica of Sant' Ambrogio in 386, outside the walls of Milan, and here he was buried. The basilica has been rebuilt more than once since and the greater part of the existing church dates from the twelfth century. But the east end belongs to the ninth century so that, apart from historical associations, Sant' Ambrogio represents an early type of Christian architecture. San Lorenzo, Milan, is also associated with the great days when St. Ambrose and St. Augustine of Hippo dictated Christian faith and action in the Roman world. San Lorenzo is an octagonal church similar to San Vitale, Ravenna. The aisle around the octagon is built in two stories, and the cupola, which was restored in the sixteenth

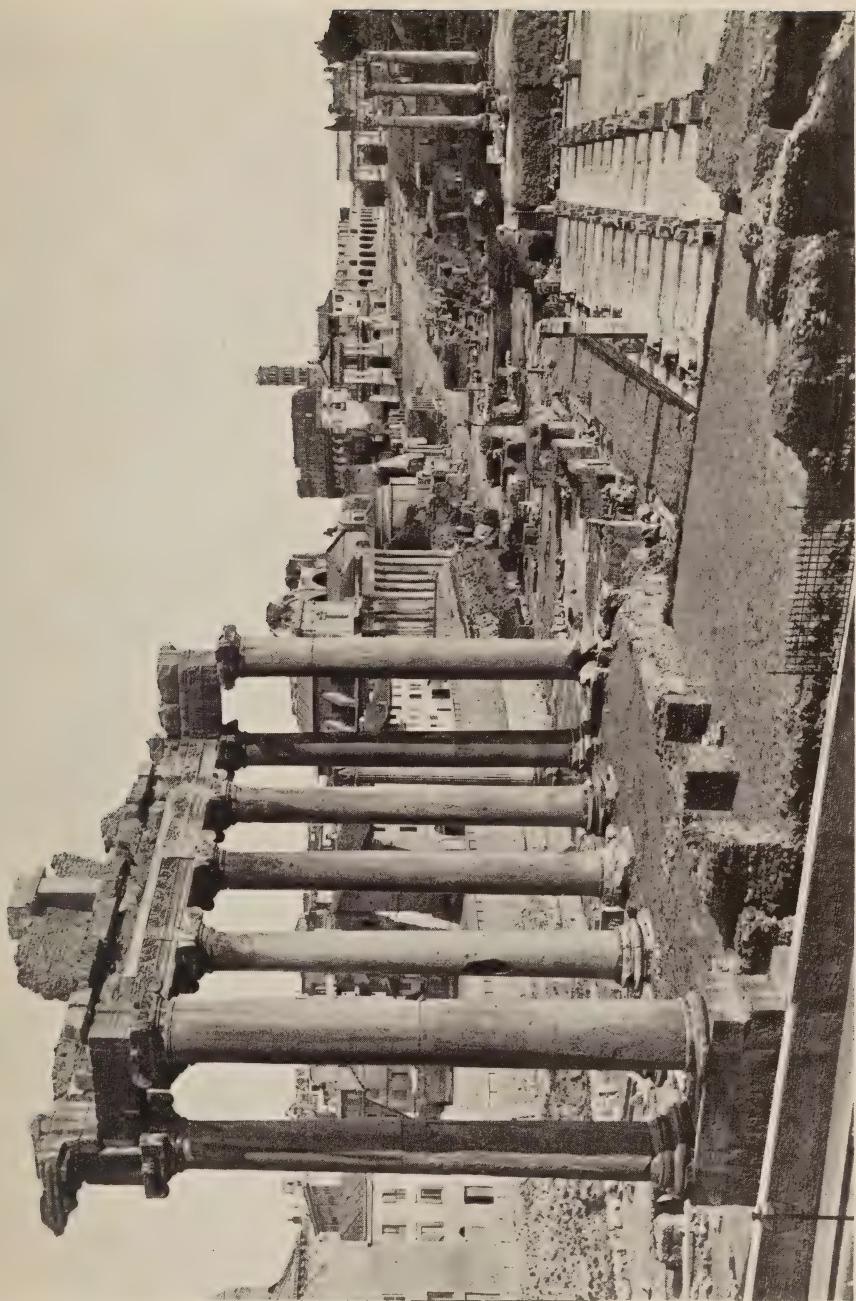
century, rises from an eight-sided dome. Four apses complete a plan of singular charm and interest.

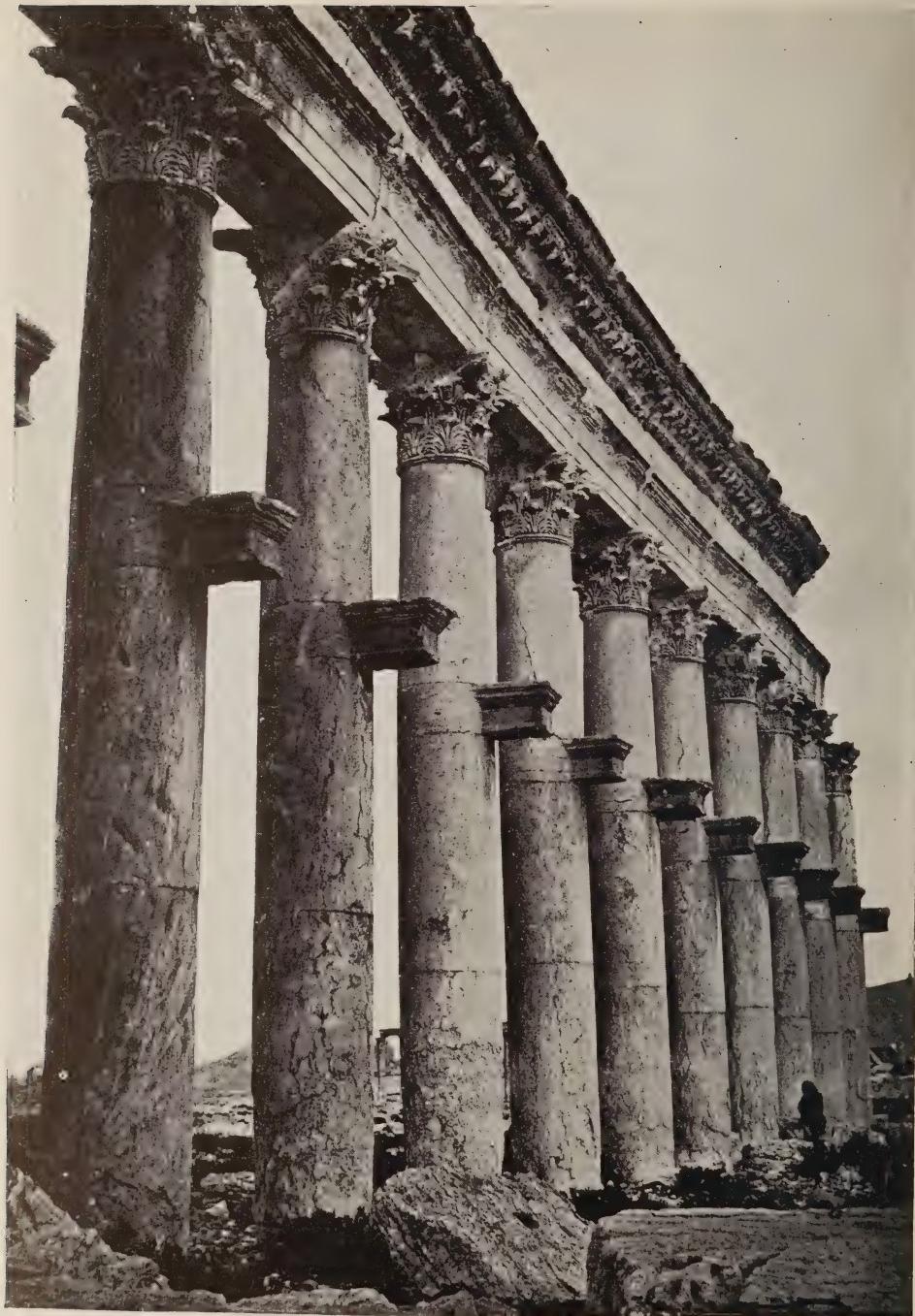
Gregory of Tours, who died in A.D. 594, gives details of the early churches in his own diocese and tells that Gratian, the first Bishop, who lived at the time of Decius, ministered in underground rooms and caves. Litorius, the second Bishop, built the first church in the diocese, a basilica formed from the dwelling-house of a certain senator. St. Martin, the third Bishop (A.D. 371) built numerous churches, while his successor built the basilica in which Martin was buried and which, eventually, developed into the well-known church of St. Martin, Tours.

Anderson

(see page 55)

THE FORUM, ROME





Bon Fils
THE TEMPLE OF THE SUN, PALMYRA

(see page 58)



Anderson

SAN CLEMENTE, ROME



Anderson

SAN LORENZO FUORI LE MURA, ROME

(see page 61)



THE CHURCH OF THE CITADEL, ANI, ARMENIA

(see page 70)

CHAPTER VI

CHURCHES OF EASTERN CHRISTENDOM. BYZANTIUM

From what has been written it will be plain that, during the early centuries of Christianity, there was not one style of religious architecture, but several. All the known types were in competition, the religious and secular styles of Egypt, Syria, Mesopotamia and Persia, as well as those in Italy and Greece. The unity achieved in a Gothic cathedral was secured by drawing upon numerous sources of invention, and continually rejecting methods which failed to meet Christian requirements. In one centre a Greco-Roman temple might be converted into a Christian church by cutting away the walls of the inner *cella* and blocking up the partitions between the outer columns of the colonnade, as was done in the seventh century at Syracuse. Elsewhere, a private house, a magistrate's basilica, or the domed hall of a public bath might be adapted. It remains to consider the special contribution which Eastern Christendom made to religious architecture and decorative art. The theme owes its content to the researches of Josef Strzygowski, who has shown that the influences arising from the East are no less significant than those derived from Italy and Greece. Hitherto, Christian historians have been apt to forget that just as the gospel message spread westward through Asia Minor, Northern Africa, Greece, Rome and Gaul to Britain and Ireland, so it spread eastward into Syria, Mesopotamia and Persia. The writer of "The Acts" has recorded that Parthians, Medes, Elamites and dwellers in Mesopotamia were members of the early Christian church in Jerusalem, together with Phrygians from Asia Minor, Egyptians and Romans. In the second century A.D. there were Christian communities beyond the Tigris, and the churches included one which Bishop Isaac built at Arbela about A.D. 130. Within 600 years Christianity had reached China. It is said that in the seventh century the Emperor Kao Tsung caused Christian churches to be built in all the provinces of China.

Owing to the Babylonian origin of the Jewish faith and the later dispersion of the Ten Tribes over the Tigris Valley, circumstances were very favourable to the spread of Christianity. They were equally favourable to the rise of a Christian art based upon the well-tested brick architecture of Mesopotamia. Above all, Persia, the great rival of the Roman Empire, must be remembered. In Persia, Christianity was in competition with the doctrines of Zoroaster, as, in the West, it was struggling against Greco-Roman polytheism or the Orphic mysteries. In Egypt, Syria, Armenia and Persia, a domed House of God developed from the circular tomb, a nave with barrel vaulting being added where congregational requirements necessitated. Vault architecture develops

naturally where brick is available and timber is scarce. In Mesopotamia and Persia, the basis of Christian architecture was not the classical column surmounted by a timber roof, but a vaulted dome of concrete or brick. Similarly, in Eastern Christendom, decoration was not personified, inasmuch as man was not the key to the whole philosophy of nature and humanity as in Greece and Rome. In Persia, religious art had long been non-representational and relied upon animal and bird imagery and such architectural forms as arcading and blind arches for its effects. Space-filling ornament, which the forerunners of the Persian people had used when still pastoral nomads, was general. Whereas in the West the development of a distinctive Christian architecture was crippled by the tradition of the timber-roofed and long-naved basilica, in Eastern Christendom vault architecture was quickly adapted for Christian worship, and the barrel vault, as well as the dome, was exploited as an element in Christian architecture. It is even suggested that the barrel vaulting of Armenia was a potent example when the Romanesque builders of Italy devised the vaulted churches which developed into the Gothic House of God.

Geographically, Armenia is a tableland in the upper valleys of the Tigris and Euphrates. At the time of the Seleucid Kings of Syria, Armenian authority reached to the Orontes, but it fell before the might of Rome, and later before the might of Persia. When King Tiridates was converted to Christianity by St. Gregory the Illuminator (A.D. 323) the mission of Armenia was plain. It was to be the bulwark of Christianity in the Hither East against the Fire-worshippers of Persia and the Moslems of Mesopotamia. For centuries, Armenia protected the Eastern flank of Christendom. The country was hilly and encouraged the growth of tribal principalities. The only binding political force was Christianity. Without this Armenia was bound to fall to Persia, a fact the Persians also knew. On one occasion 300 Iranian priests entered Armenia with a Persian army, but the Armenian zeal for Christianity was unshaken.

St. Gregory founded several churches in Armenia, notably at Vagharsapat, the best known being built on the site of the martyrdom of St. Gaiana, Gregory using stone, brick and cedar wood, collected specially for the purpose. The existing church of St. Gaiana dates from the seventh century and is a concrete building, faced with stone, having a central dome raised upon a drum. Spirelets and bell turrets, suggesting an open lantern, were added in the thirteenth century.

Architecturally, the golden age of Armenia was from the sixth to the thirteenth century. The churches and monasteries may be studied in Mr. H. F. B. Lynch's *Travels in Armenia*, in several volumes by Professor Strzygowski, and in the sketches of Mr. A. Fetvadjian, who spent 20 years in making detailed drawings of Armenian churches and their decoration. Armenia was deforested early in its history and, in place of wood, builders used concrete made from river mud mixed with lime. Finely jointed masonry in large blocks was added to the concrete core with such effect that after 1,000 years and more, and after 500 years of abandonment, the wrought stone can hardly be detached

from the concrete. In planning round and cruciform designs, in roofing their concrete vaults, and ornamenting their churches, the Armenians showed remarkable invention. In form, the Armenian church seems to owe much to the domed tomb of Zoroaster, the founder of the faith enshrined in the Zend Avesta. A surviving example of the one-domed church based upon the typical Persian tomb is the Baptistry at Nisibis in Mesopotamia, which was built in A.D. 359. The single-domed tomb was enlarged so that it became a hall of assembly, an apse being added on one side and, if necessary, a barrel vaulted nave. King Gagik built some remarkable churches in the tenth century at Ani and Vaspurakan with the aid of his court architects, Manuel and Trdat, who based their designs upon a dome building, arising from a square plan, in the Persian manner.

The Cathedral of Ani, which is 100 feet long and 65 feet wide, was commenced about 989 and was completed by Trdat in 1001, the architect using piers of clustered columns and slightly pointed arches for the support of his dome. The date of the Cathedral at Ani is important, especially as the Gothic features can be traced in Armenian architecture even earlier. Apart from the dome, other arches in the Cathedral at Ani are rounded. The Church of St. Gregory, also built by King Gagik, the Church of the Holy Redeemer (twelfth century) and the Church on the Citadel, with its circular tower crowned with a dome, are other notable buildings at Ani. Generally, the dome was raised on a lofty drum and covered the crossing, the rest of the church being covered with barrel vaults. Other features of Armenian design were triapsal endings and the use of blind arcading for the decoration of the lower walls and the drum beneath the dome. Western architects who attempted to adapt the Roman basilica to Christian usage had found it difficult to give a sense of spaciousness and secure unity of design. This was partly due to the narrowness of the western nave with its timbered roof, and partly to the importance of the apse in early ritual, which made it difficult to exploit the device of a spacious dome over the crossing. In Armenian designs, the space under the dome was utilised as a means for awakening the devotional mood, and developing the sense of solemnity and awe which accompanies the religious mood as surely as joyful exaltation. Nevertheless, it must not be thought that the builder in Armenia had freedom to develop his art, guided by architectural considerations alone. On the contrary, authority continually controlled his use of material and design. Canon 182 in the Armenian Church Law, which was drafted well before the eighth century, lays it down :

“ Only the bishop orthodox in faith may design the plan of a church, or the Chorépiscopos or the Peredut with the bishop’s consent. If any presume to plan a church without the bishop or Chorépiscopos, we ordain the destruction of the plans. Should, however, an unauthorised plan be sanctioned, we recommend that it be again submitted for approval. Thus shall the designing of the church be blameless.”

The altar in an Armenian church was raised 3 feet above the floor for the congregation and was approached by a flight of steps. In the

cupola was often placed a figure of Christ Pantokrator, Christ as the all-powerful ruler, a form which was natural in the East—where power had long been associated with despotism. Painted and carved symbolism can be studied in the remarkable monastic Church of the Cross at Achthamar, an island in Lake Van, where the carved decoration dates from the early part of the tenth century. The church was built by Gagik, then Prince of Van, from material taken from a fortress destroyed in war. A frieze in low relief runs round the church, showing a hunting scene set in a conventional "forest" of vine leaves and pomegranates, as if to suggest at one and the same time the joys of the chase and the goodfellowship of the wine cup. From the religious standpoint the design seems to be connected with the Hvarenah landscape theme in Persian art, which is associated with the cult of the dead, Hvarenah being the power of vital growth in nature and humanity, which is also regarded as governing the course of the sun, the moon and the stars in the heavens. In Zoroastrianism, Mazda the Brilliant, the Majestic, Greatest, Best and Most Beautiful, was the source of Hvarenah, and the All-knowing was, therefore, the source of the life in the vine and the pomegranate, as he was the source of life in the lions, bears, bulls and birds which also mingled in the vine scroll. On the exterior of the Church of the Cross are also carved scenes from the life of Jonah, while on the western side King Gagik is represented standing before Christ and holding a model of the Church. Elsewhere evangelists and saints are carved with winged monsters which recall the decorations of an Assyrian palace, all evidence of the manner in which a score of national styles were struggling one against another for a part in the final unity which would represent Christian symbolical decoration. Persian, Syrian, Mesopotamian, and Byzantine influences are apparent in the Armenian House of God between the sixth and twelfth centuries, and, in its turn, Armenian architecture influenced Byzantine and other Christian art in the West. What precise form this Eastern influence took and what was its extent have still to be determined, but that the domed church of Armenia was a factor in the evolution of Christian architecture seems beyond doubt.

Unfortunately, Armenia was not allowed to carry her architectural inventions to full accomplishment. Neither the leisure, which only peace can give, nor the wealth, which is another concomitant of major art productions, were at her command. A warrior like Tigranes the Great was not only able to make Armenia the seat of a self-supporting monarchy, but engaged in a policy of national expansion, attacking Persia and subduing Syria and Palestine. Armenia, however, was a chaos of tableland and mountain and had no fruitful plain or important trade-route to assure her of continued wealth. When the strong hand of a Tigranes was removed, Armenia became the battle-ground of contending civilisations and creeds, Byzantium on the west and Islam on the east, and the development of religious art in Armenia suffered accordingly.

BYZANTINE ARCHITECTURE

When Constantine, by the Decree of Milan in A.D. 313, conceded religious liberty to his Empire, the days of classic Rome were numbered. The long threatened invasion of the Germanic tribes was at hand. Even in the time of Marcus Aurelius every Roman capable of bearing arms had been enrolled in the forces defending the Empire. Italy itself was secure. But such outposts as the Danubian provinces were only saved by calling upon the barbarian allies to assist in the defence of the Empire.

Constantine anticipated the inevitable when he determined upon the bold policy of transferring his capital to the shores of the Bosphorus, the site of the Greek towns of Byzantium and Chalcedon. This course was the logical outcome of Diocletian's policy of making the Imperial office an Oriental despotism. The foundation stone of Constantinople was laid in A.D. 326. For a time the Emperor maintained his hold upon the western portions of his dominions, but during the century after Constantine's death, the Empire was definitely divided, and Rome became "a provincial city with a past." The immediate future was with the Eastern Empire.

Life in Constantinople closely resembled that in Rome. Senators were brought from the West and induced to settle in the new capital by bribes of estates on the shores of the Bosphorus. The mass of the population—artisans and labourers—were attracted by periodical distributions of oil and wine and by largesses of corn. Indeed, the very site of Constantinople, with its hills and cliffs, recalled that on which Imperial Rome had arisen. Constantinople also has its Seven Hills, crowned to-day with mosques built upon the pattern of Sancta Sophia. Unlike Rome, Constantinople was a city built about three seas—the Golden Horn, the Bosphorus and the Marmora—the last having a wondrous beauty, with its cliffs breaking into the sky-blue waters and, above, the mosque-crowned heights affording a lovely skyline of domes, half-domes and minarets. To this site, works of art were brought from different parts of the Empire, until Constantinople was as richly furnished with art treasures as Rome or Athens had been.

The wealth of the city grew apace. All the greater trade routes between Europe and Asia converged naturally upon Constantinople. It became a recognised clearing-house between the two continents.

Two constructions of the time of Constantine remain, the Bin-Bir Derech, or cistern of One Thousand and One Columns, and the Yeribatan Serai, two underground reservoirs for storing water. Most of the Emperor's buildings at Constantinople were hastily built, however, and of poor material, and were rebuilt by Justinian in the sixth century. There were no stone quarries near Constantinople; when the supply of marble columns from Greece and Italy was exhausted, builders in the Eastern Empire relied upon rubble, mortar and particularly fine-quality, well-baked bricks about $1\frac{1}{2}$ inches thick. This naturally led to arch-construction replacing the Greek method of lintel building. The most characteristic feature of the new buildings was

their domes—shells of brick concrete veneered with marble and mosaic, the marble and mosaic not only covering the vaults but the arches upon which the domes were built. The domes seem to have been largely the work of Eastern craftsmen, though Greeks were also employed. Byzantine architecture, in general, was a compromise between Eastern and Western influences, prominent among the Eastern influences being that of Persia with its exquisite sense of decorative detail.

Until the sixth century, Constantinople was a second Rome, touched with Christian and Oriental influences, but a second Rome. A change came in the time of the Emperor Justinian. The only existing church in Constantinople dating from pre-Justinian times is St. John Studios, a three-aisled basilica which was built in A.D. 463. The church was part of the monastery of the *akoi metai* or Sleepless Monks, who were pledged to carry on a ceaseless divine service, day and night. Under Justinian, the Byzantine style not only developed but was perfected.

In general a Byzantine church stood apart in a close surrounded by trees, and was entered through a cloistered forecourt having a fountain in the middle. The vestibule was in the form of a *narthex*, while the apse at the opposite end was shut off from the body of the church by a screen. In the Eastern ritual the divine mysteries were celebrated behind this solid stone screen, which was pierced by doors, the centre one being curtained. During the prayer of consecration the doors of the screen were closed and the veil before the central door was drawn. Around the curved wall of the apse were seats, with the Patriarch's throne in the centre. Before the throne was the altar, under a baldachino held up by four columns.

Eastern Monasticism did not favour great monastic churches, such as those which arose in the West under the rule of St. Benedict, St. Bruno and St. Bernard. Thus Mount Athos was the centre of a group of autonomous monasteries, which united to form a federal theocracy under the rule of St. Basil, this *regula* being supplemented by the *typikon* of each house. Perched on rocky crags above the Aegean, the monastic buildings of Mount Athos surrounded an insignificant church in which the Divine Offices were continually recited. The monasteries on Mount Athos commenced with lonely hermits who lived in caves. Gifts from pious benefactors made collegiate life possible, but Mount Athos, and Eastern Monasticism in general, never forgot its hermit origin, or adopted the missionary ideals of the Benedictines. The circumstances favourable to outstanding architectural efforts, therefore, were not present so far as Eastern Monasticism was concerned. In Byzantium, the organising force was the Crown, not the Church, which was subordinated to the State in the Byzantine imperial system in a manner unknown in the West.

Justinian came to the throne in A.D. 527. He was not an inexperienced ruler. Justin, his predecessor, had been a man of small political genius. He had willingly allowed his nephew to take a larger share of control than is usually given to an heir-apparent. Justinian saw that the political situation in the East differed from that which earlier Roman Emperors

had faced. In the fifth century the Germanic nations had been strong enough to encroach upon the Empire. In the sixth century Justinian felt that the Eastern Empire was strong enough to strike back. Britain, Gaul, and other lands in North-Western Europe were lost, but the Vandal Empire in Northern Africa was vulnerable. It might be that Rome itself could be regained for the Empire.

Justinian was not without resources. The Byzantine army was the best equipped and most reliable force in the Western World. The old Roman infantry system had been put aside. The generals of Justinian, Belisarius and Narses, won their victories with armies in which mail-clad horsemen were the most potent factor. By 533, Justinian felt that the political position in Constantinople itself was sufficiently stable. Belisarius, with 5,000 horsemen and 10,000 foot, sailed for Africa. Carthage was taken. Two years later Belisarius captured Sicily, and, in A.D. 536, he entered Rome. Ravenna, whither the Ostrogothic king had retired, fell four years later. A Roman emperor again ruled over a dominion comparable with that of Augustus, Trajan or Hadrian.

After the custom of great conquerors, Justinian celebrated his victories by a series of public buildings, among them Sancta Sophia, the Church of the Holy Wisdom. "Hagia Sophia" was dedicated in A.D. 537 to the second person of the Trinity, God the Son. Architecturally, Sancta Sophia solved a problem which had been troubling Christendom since a religion of personal devotion superseded the earlier religion of communal thanksgiving. The earlier Greek and Roman temple had been a shrine. In the age of Justinian, a church was first and foremost a meeting place where the faithful could lift up their hearts in prayer and watch the performance of the sacred rites. A few priests and the privileged heads of certain clans had entered the shrines of the great gods and goddesses of Greece and Rome. The whole body of townsfolk might seek admission to the cathedral of Constantinople. In the sixth century after Christ the first essential in a church was large, unencumbered floor space; indeed, it was the general problem of Roman civic architecture applied to religious art. This problem of interior space was solved by Anthemius, of Tralles, and Isidorus, of Miletus. Unlike a Greek temple, the exterior was of small importance. The confusion of half-domes and shelving roofs of Sancta Sophia had none of the austere beauty of a Doric temple or the beautiful grace of the Maison Carrée at Nîmes, with its delicate Corinthian columns. But within, it had a beauty all its own. The central cupola is 107 feet in diameter and rises 180 feet from the ground, springing from a square connected by arches. Procopius (*De Aedificiis*, II.) described the dome as floating in air and "suspended by a golden chain from Heaven." It dominates the building. Instinctively, the eye is led from the central altar in the apse to the side galleries and thence from arch to arch of the subsidiary domes to the central cupola. Whereas a low half-light was sufficient to display the meagre decorations of the *cella* of the Parthenon, the interior of Sancta Sophia is aflame with light. Salzenburg wrote, "A flood of light pours itself through the house of God. The East

sends its first rays through the six large apse windows into the nave, and the evening sunshine, glowing through the large western window, bathes the vault in fire." And what a beauty of form and colour the light reveals ! The interior of Sancta Sophia is a glow of multi-tinted stones and brilliantly-coloured mosaics, the columns of marble, porphyry and *verd antique* rising in tiers to support the arches on which the great dome and half-domes rest. The central square of Sancta Sophia was the equivalent of the basilican floor space, while the ambulatory, with the surrounding colonnade, served the purposes of the aisles of a basilica. And above is the soaring cupola, together with the blaze of gold and colour, which together symbolize and express the mystery and might of God. "I have surpassed thee, O Solomon," cried Justinian.

Beautiful as was the decoration of Justinian's church, the true glory of Sancta Sophia was the work of its architects, Anthemius and Isidorus. The unifying effect of the central dome was increased by the succession of semi-domes on either side. As has been said, the central cupola rose from four arches, this being possible owing to the device of *pendentives*, spherical triangular constructions which were set between the arches of the dome and which also helped to support it. The square open space in the centre was thus enlarged by the space beneath the half-domes, which was increased still more by the space beneath the surrounding colonnade. What the Parthenon is in the architecture of the column and the lintel, Sancta Sophia is in the architecture of the column and the dome. The architectural beauty lies in the fact that it is a full and perfect expression of dome structure, inasmuch as all that does not belong to dome structure has been eliminated, as all that did not belong to lintel architecture was eliminated from the Parthenon. Throughout Anthemius and Isidorus had a clear, intellectual perception of the end they had in view and how it was to be attained. They knew that the dome, the semi-domes, the arches and the walls of Justinian's church would be enriched with coloured marbles and mosaics, "fresh green as the sea or emerald stone," or again, like "blue cornflowers in grass." But they so ordered their design that formal beauty gave character to the church, not the added decoration. This is the height of architectural achievement ; when it is added to a rich originality, it sets the architects of Sancta Sophia high among the masters of their art.

This becomes plain when Sancta Sophia is compared with the church of San Marco, at Venice, where the dome principle is merely used to display the resources of mosaic as a building material. The art of gilding a vitreous cube with gold leaf, which is fixed by melting over it a transparent film of glass, was a Byzantine invention. Used with similar cubes of coloured glass, it was the basis of the wall-paintings in Sancta Sophia, and, centuries later, suggested the domed church of San Marco. As Mr. March Phillipps has written in a brilliant page of his *Works of Man*, structural form tends to kill mosaic by making it appear thin and superficial, while mosaic tends to vitiate structural form by making it appear indecisive. A substance embedded in a cement ground-work does not lend itself to perfect smoothness of surface or perfect sharpness

and regularity of edge. The decorators of San Marco sacrificed form to colour. Their ideal was a dark interior, built out of solid gold and studded with figures and groups in swarthy crimsons and blues. The lofty array of light and airy domes which made the fascination of Sancta Sophia was exchanged for a group of low, heavy domes of ponderous solidity. San Marco seemed rather "a cavern delved out of the earth." Whereas, in Sancta Sophia, the light was brilliant, in San Marco, it was deep twilight.

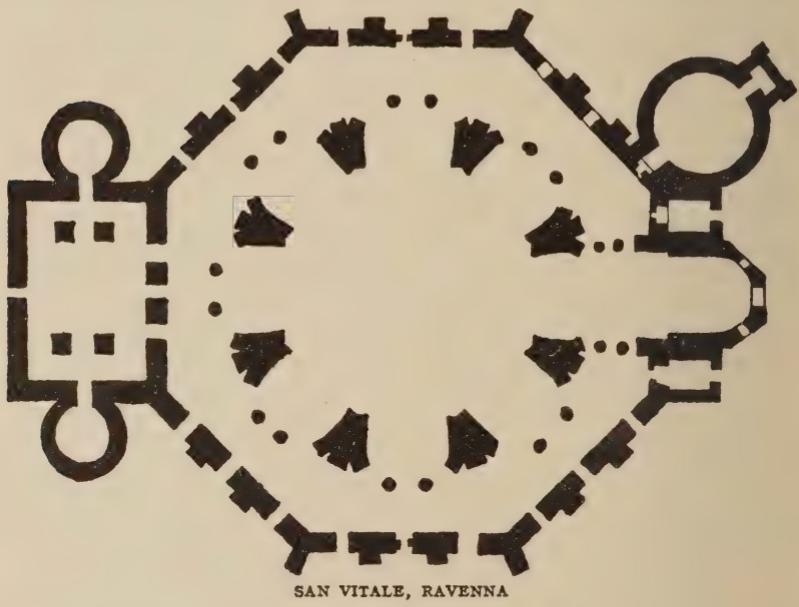
The beauty of San Marco is not due to structural form, but to the wealth of mosaics. The many vaults and domes, the chapels and the upper parts of the walls are all covered with richly-coloured scenes. This soft flush of prismatic light, together with the glow of the multi-coloured marbles which encase the pillars and lower walls of the church, are not to be forgotten. The colour in San Marco has been an inspiration to all who have used colour for 1,000 years. No one who turns from the glow within San Marco to the glow on the canvases of the greater Venetian painters can fail to perceive the source of the rich suffusion of colour. The colour in San Marco has not only purity and brilliance. It has depth; it has light and shade. The makers of San Marco did their best. But those who realise the fundamentals of architecture most fully will know that the builders of Sancta Sophia did a greater thing when they combined colour and form and, at the same time, demonstrated the possibilities of the dome in Christian architecture.

As a result of the Young Turkish regime, Sancta Sophia is no longer used as a mosque but has been converted into a museum of Byzantine art. The cleaning of the mosaic work, and the removal of disfiguring Arabic shields, are bringing the church back to the condition in which the architects and decorators of Justinian left the building. Professor Whittemore's report upon the Mosaics of the Narthex gives promise of a fresh body of knowledge regarding early Byzantine art.

Apart from Constantinople, the most characteristic churches in the Byzantine style are to be found at Salonica in Greece, and Ravenna in the Northern Adriatic. The Ravenna churches have a special interest, influences derived from the Latin West being mingled with characteristics derived from Eastern Christendom. Like Venice, Ravenna lies in a great lagoon at the mouth of the Po, and the houses are built on piles in the Venetian manner. During the Germanic incursions such a place afforded a better chance of safety than a walled city in a plain. In A.D. 396, the Emperor fled to Ravenna from Rome, and Theodoric, the Ostrogothic king, between 493 and 525, made Ravenna his capital. The basilica of Sant' Apollinare Nuovo, originally dedicated by the Arian Goths to St. Martin, recalls Theodoric's efforts as church builder. The basilica was designed in the Roman manner. As Theodoric said, "We owe everything to Roman artists."

Very characteristic, too, is the church of Sant' Apollinare in Classe, a basilica of brick designed under Theodoric, but finished about 550, after Ravenna had passed to the Byzantines. The nave is large, being almost 50 feet wide, the side aisles making the church almost 100 feet across. The chancel is raised and is reached by a flight of steps, the

space below being a burial place for saints, approached by a narrow passage following the semi-circular apse, so that pilgrims might view the shrine. In 563, the Council of Braga gave permission for burial in churchyards "in case of necessity," though the Council forbade burial within the walls of a church. Later, a Council at Mayence decided that "no one should be buried in a church except bishops, abbots, worthy priests and faithful laymen." In the end the habit of burying saints or prominent Churchmen near the altar led to the increase in size of the crypts until the chancel was raised several feet above the level of the



nave, as at San Miniato, Florence, or San Zeno, Verona. A further development was the chantry chapel of late mediæval times.

The domed church of San Vitale at Ravenna was also planned in the time of Theodoric. The King's intention was to put up a personal mausoleum, but the church was completed by Justinian after the capture of Ravenna by Belisarius. San Vitale is a beautifully-planned octagonal building with an apse and a vestibule, arched and vaulted throughout, but the central dome makes it appear more Byzantine than Sant' Apollinare in Classe. The architects at Ravenna, however, were not particularly interested in the dome as an architectural *motif*, and none of them experimented in the mingling of domes and half-domes, which gives the plan of Sancta Sophia its unique interest. In general, the designers of the Ravenna churches relied upon the horizontal lines of the Roman basilica. The decoration of the Ravenna churches, however, was Eastern in character. The long-naved Roman basilicas had been decorated with columns or pilasters and ceilings of gilded wood, the mosaic decorations being fashioned from coloured

marbles. The decorators of the Ravenna churches, however, followed the Byzantine example and used cubes of coloured glass. In the Ravenna churches, the things of supreme worth are the brilliant glass mosaics, seen by the diffused light which filters through the clerestory windows. The mosaics are very different from the sculpture with which the Greeks and Romans decorated their temples. Whereas the Greco-Roman decorator was a naturalist, the Byzantine was content to treat the human form symbolically. In representing a man or woman, he flattened the figures, made little use of light and shade, and eliminated the impression of three-dimensional space. The suitability of the strongly-drawn Byzantine figures to the severe lines of a basilica, however, is self-evident. Standing out in dark outline from backgrounds of blue or gold, these mosaics fill the rectangular spaces afforded by the basilican plan in the happiest manner, and are no less successful in filling the semi-domed space above the altar in the apse.

The famous groups of Justinian and the Empress Theodora, with their suites, on either side of the sanctuary of San Vitale, are examples of Byzantine mosaic work at its best. The composition is necessarily cold and unemotional, but the colouring of the glass cubes is so glowing and harmonious that the eye forgets that the medium is the uncompromising mosaic. In the portrait of the Emperor, the sensitive lips are in character with the ascetic scholar—hard, narrow, but determined—known to the world as Justinian. Over and above these charms of colour and draughtsmanship, the mosaics are in a high degree “decorative,” and have a fitting place among the severe lines of a basilica. Regarded from the standpoint of suitability to a House of God, however, these mosaics suggest an imperial rather than a religious origin, in the sense that they were set there because a powerful ruler had associated himself with Christianity and linked political ambition with religious architecture. Much was gained from this association in rich material and abounding craftsmanship, but something was lost. Inasmuch as the Emperor chose to make Christian doctrine and ritual a secondary consideration, a scene of courtly pageantry was naturally set upon the walls of San Vitale, Ravenna, rather than as representation of the Virgin Mother of Galilee or the sacrificed Jesus of Golgotha. When the First Person of the Trinity was represented, it was God as Judge rather than the kindly Father of man.

Elsewhere, as in the old cathedral of Ravenna, which was unfortunately destroyed, non-representational methods of decoration were adopted. The nave walls were ornamented with hunting and fishing scenes and the apse was decorated with a symbolic landscape, doubtless the Christian equivalent of the Paradise pictures of Persia, described by Strzygowski. In many respects this non-representational decoration was more characteristic of the Christian outlook during the first six or eight hundred years of Christendom than such designs as the Justinian or Theodora groups. The insistence upon human themes represented the triumph of the Greco-Roman West over the Jewish, Syrian and Persian East.

So far as the early Fathers of the Church were concerned, there is

no doubt as to their purpose in authorising wall pictures, and making them a feature of the Christian House of God. St. Basil, who lived about 379, said in a sermon, "Rise up now, I pray you, you famous painters of the good deeds of this army. Make glorious by your art the mutilated images of our leader. With colours laid on by your cunning, make illustrious the crowned martyr, by me too feebly painted. I retire vanquished before you in your painting of the excellences of the martyr." The purpose of the painted symbol was to reinforce the written or spoken word of the gospel message. Pope Gregory I. (*Ep. VII. 3*) wrote : "Painting is used in churches that they who are ignorant of letters may, at least, read on the walls by seeing what they cannot read in books."

Paulinus Nolanus explained his reason for covering the church of St. Felix at Nola with pictures even more fully in a letter (*Poema de S. Felice natal*, IX., p. 541).

" You ask my object for adorning the walls with animated figures. This is the reason. The gatherings which the fame of St. Felix brings together are known to all, the crowd is great. Here are rustic minds, not wanting in faith, but unskilled in letters and long accustomed to profane rites. These, coming as strangers, are brought home to Christ through the merits of the saints. They have left their far-away homes, regardless of the frosty weather, for their warm faith keeps out the cold. Now in throngs they fill the hours of the wakeful night with joyfulness, dispelling sleep by mirth, and by candles the shades of darkness. But pity it is that, in all their joy, they fail to keep the bounds of temperance, and quaff the wine-cup within the holy places. To a sober gladness one would wish to set no limit. Nevertheless, I pardon the mistake of their untrained spirits. Unconscious of error, they fall through their warmth of enthusiasm, thinking in their blindness that the saints rejoice when their tombs are reeking with the odour of wine. Wherefore, it seemed to us good to deck the house of Felix with sacred pictures, that haply their forms and colours might seize upon the astonished imaginations of the country folk. Above the designs are placed their titles, so that the written word amplifies what the hand has drawn. Thus, while the crowd point out the pictures one to another, they are less quick than before to turn to feasting ; they feed with their eyes instead of with their lips. Wondering at the paintings, they forget their hunger and a better habit lays gradual hold upon them. As they read the sacred stories they learn from pious examples how honourable are holy deeds and how satisfying is sobriety. So comes forgetfulness of wine. The cups grow fewer as the day passes in contemplation, and the time devoted to these sights of wonder leaves but few hours to be spent at table."

Lastly, the Synod of Nicæa, sitting in A.D. 787, made this declaration regarding the stone and bronze statues :—

" Venerable and holy images should be set up in the same manner as the figure of the precious and life-giving Cross—the images,

to wit, of our Lord and God the Saviour, Jesus Christ, and the one undefiled Lady, the holy Mother of God, and of the honourable angels and all saints and holy men, for the honour of the image passes on to the original, and he who reverences the image reverences it in the person of Him who is therein depicted."

A stiff Byzantine figure in its stiff robes, repeated again and again along a church wall, lacks the charming variety which Hellenic art had taught the world to look for. In the end the Byzantines devised a series of symbolical figures to represent the principal personalities in the Bible story. So long as the painted figures could be recognised, all was well. To this day the Greek Church insists upon the production of formal designs, which have been repeated with little or no change for centuries. When M. Didron discovered the "Painter's Guide," at Mount Athos, the explanation of Byzantine formalism was apparent. The guide enumerates the *motifs* of hundreds of themes from Old and New Testament story and hagiology. Here is a passage from the instructions regarding the method of depicting the "Holy Patriarchs according to the Genealogy."

"The First Father, Adam ; an old man, long hair, white beard.
 The righteous Abel, son of Adam ; young, beardless.
 The righteous Seth, son of Adam ; an old man, brown beard.
 The righteous Enosh, son of Seth ; an old man, beard bifurcated.
 The righteous Mahalalel, son of Cainan ; an old man, bald.
 The righteous Jared, son of Mahalalel ; an old man, beard trifurcated."

When it is remembered that such inventions were repeated during 1,000 years, the question must arise : What was there in this denaturalised art which made it acceptable to the Byzantine people ? The answer carries one into the deeps of Byzantine life—social, political, philosophical and spiritual. It is an historical, not an æsthetic problem. Certainly, the formalism of the Byzantine style was not due to faulty technique. A denaturalised and schematic method was judged to be best suited to convey the ideas inherent in Eastern Roman Christianity.

The presence of an Emperor ruling at Constantinople was deemed necessary if the Eastern possessions of the Roman Empire were to be held. This brought certain consequences in its train. The later Byzantine emperors chose to dispense with the energetic deputies of earlier Roman history. A strong body of bureaucrats, each member of which relied on a superior, replaced the military administrators who had served earlier Roman Emperors. The official hierarchy was headed by four Praetorian Prefects, the symbols of their office being a silver inkstand, a lofty chariot and a great pencase of gold. A silver inkstand and a gold pencase ! And among the subservient bureaucrats were the Patriarchs of the Byzantine Church ! The characteristics of the Byzantine Empire were those of a soulless machine rather than a living organism, but on the whole the system served well. While Italy, France, Germany and Spain were in the throes of political strife, the Byzantine polity

maintained itself. Nevertheless, in Byzantium, bureaucracy and departmentalism assumed a peculiarly vicious form owing to the fact that so many offices were hereditary, and there were thus two reasons for keeping in a fixed groove—the parental as well as the official. Bureaucratic methods led to mechanical and unemotional methods of thought, in marked contrast to the human methods which had characterised Greek and Roman life, and were later to vitalise Gothic architecture. In the centuries following Justinian, moreover, the international situation forced Byzantium to emphasise rather than relax its chosen political and religious system. After repulsing Persia, early in the seventh century, Byzantium was faced with an even more dreaded foe, the Arab followers of Mahomet. The Prophet himself had not considered the possibility of conquests outside Western Arabia. His follower, Abu Bekr, however, was more hopeful. In A.D. 633, the Arabs marched to the Euphrates, and Damascus in Syria capitulated in 635. In the following year Heraclius, the Byzantine Emperor, took the fragments of the True Cross from Jerusalem, the city falling to the Arabs in 639. Egypt was lost in 641. True, Byzantium stayed the onward rush of the Arab power, but only at the cost of most of the Greek and Roman elements in life and thought. The philosophical Schools at Athens were closed; the Consulate was abolished; a bastard Greek replaced Latin in official documents. In short, the Eastern Roman Empire of Constantine and Justinian gave way to Byzantium, and Greco-Roman art became Byzantine.

There is no more illuminating chapter in art history than the Iconoclastic movement which followed the conflict between the Saracens and the Byzantine kings of the eighth century. Although the Saracens failed to capture Constantinople they had such success in Northern Africa and Syria that the Byzantine rule was threatened with destruction. The Saracens besieged Constantinople in A.D. 717, and the capital was only saved by the military and administrative genius of Leo the Isaurian, who became Emperor in 717. He was a man of low birth, a native of the Taurus, a wild, wooded district, whence were recruited the fierce soldiery who made up the bodyguard of a Byzantine Emperor. Leo defeated the Saracens but failed to conquer the Lombards in Italy, who took Ravenna from the Byzantine Empire and threatened Rome. The failure to hold Ravenna persuaded the Eastern Emperor to emphasise the pre-eminently Byzantine qualities in the Eastern Empire. In 725, Leo put himself at the head of the movement for the destruction of all religious pictures, the movement being really directed against his enemies, the monks, who were the principal manufacturers of sacred pictures. The Emperor ordered that all pictures and images should be removed from the Churches and the painted walls covered with plaster. Many Byzantine artists moved to Italy and other places under the control of the Pope. The Iconoclastic disturbances did not end for 150 years. The Iconoclastic party was finally defeated in A.D. 842, in the reign of the Empress Theodora, when painted figures were once more permitted in the decoration of churches, though the ban upon statues continued.

Mosaic decorations, based on the Byzantine manner, were common throughout mediæval Christendom, particularly in Italy, where it was easy to import expert mosaic workers, especially after the Iconoclastic troubles in Constantinople. Characteristic examples of this schematic art can be seen in the Baptistry built by Constantine for St. John Lateran, and recall the close connection between the eastern and western branches of Christian art.

The Byzantine Empire, and the rich and ingenious, but de-humanised art which it encouraged, lasted on for many centuries, influencing the Latin West continually. In times of disorder in the West, and they were frequent, Byzantium was the only stable polity in Christendom, so the influence of craftsmen trained in Byzantine methods must never be forgotten. Our search for buildings which serve as worthy symbols of the All-Good and the All-Beautiful, however, calls us to other lands. Before we consider the circumstances which made a Gothic cathedral possible, the architecture and symbolic sculpture of the Far East demands attention, and it is to the House of God in India, China and Japan, that we turn.

CHAPTER VII

THE ART OF ANCIENT INDIA AND CHINA

The art of the East, particularly that of the Buddhists and Hindus of India, affords many analogies with Christian art in Western Europe. A Western critic may deny his admiration of a Buddhist or Hindu temple ; but he should attempt to understand it ; if not because it represents the art effort of one-fifth of the human race, then for the analogies it offers to the art of his own people. Eastern art differs from Western, but the affinities are more deep-rooted than many would admit at first sight.

In Asia, civilisation has been chiefly confined to great river valleys, where a rich alluvial soil quickly gave the leisure which is a necessary prelude to art and science. The greater part of Northern and Central Asia is suited only for overworked hunters and pastoralists. It was when these hardy Aryan, Mongol or Tartar tribesmen fought their way to the west, the south and the east, that they organised great civilisations in Persia, India and China. In the fertile plains they developed national polities, produced epic and lyric poetry, and made progress in the sciences and arts.

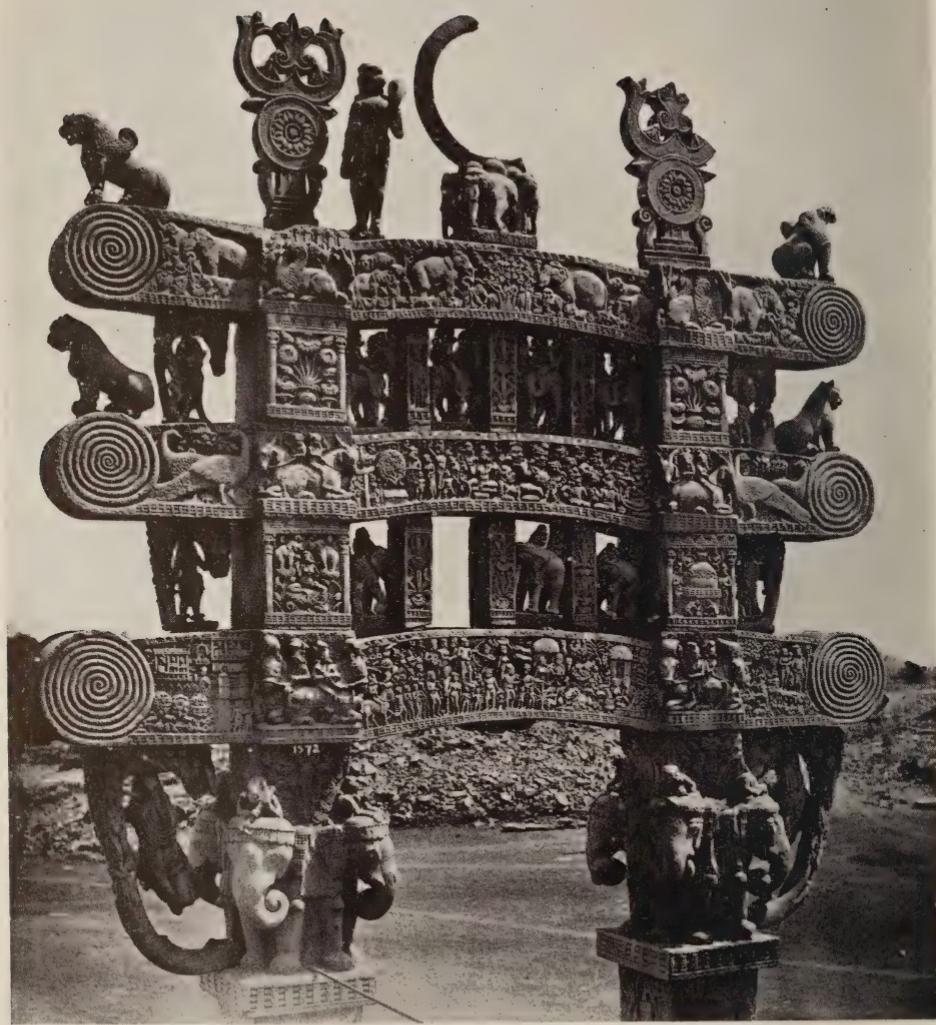
Of early civilisation on the banks of the Indus and Ganges little need be said. The Aryan invaders, it may be, separated from their Persian cousins in Iran two or three thousand years before Christ, though the time may well be extended. A thousand years may have gone before the dark-skinned aborigines were driven to the forests or were forced to refuge in their mountain fastnesses. Many more centuries were occupied in tribal warfare between the Aryan princelings, centuries in which the Vedic ritual of sacrifice was elaborated, and such epics as the Ramayana and Mahabharata were written. The epic age did not give rise to vital architecture and sculpture in Hellenic Greece ; it does not seem to have done so in the Indus and Ganges valleys. Mention has already been made of the primitive House of God in India—a tabernacle where the fire for an Aryan settlement was tended by the Brahman priest. A hut of mud, wood or thatch, known as the fire-house, became the dwelling of a God because of this kindling of the sacred fire. For very many centuries all the needs of ritual were satisfied by the construction of tabernacles of various shapes, in which sacrifices to the Spirit of Fire were made by the tribal ruler or the priest attached to the shrine. If more was needed, carved posts were cut from a sacred tree and were decorated with the serpent emblems of the Fire Spirit, or the mystic lotus flower, which was the emblem of the life in the cosmic waters. In time, a body of builders and wood carvers arose, which was honoured by inclusion in a special caste, ranking with that



SANCTA SOPHIA, CONSTANTINOPLE

Sebah

(see page 75)



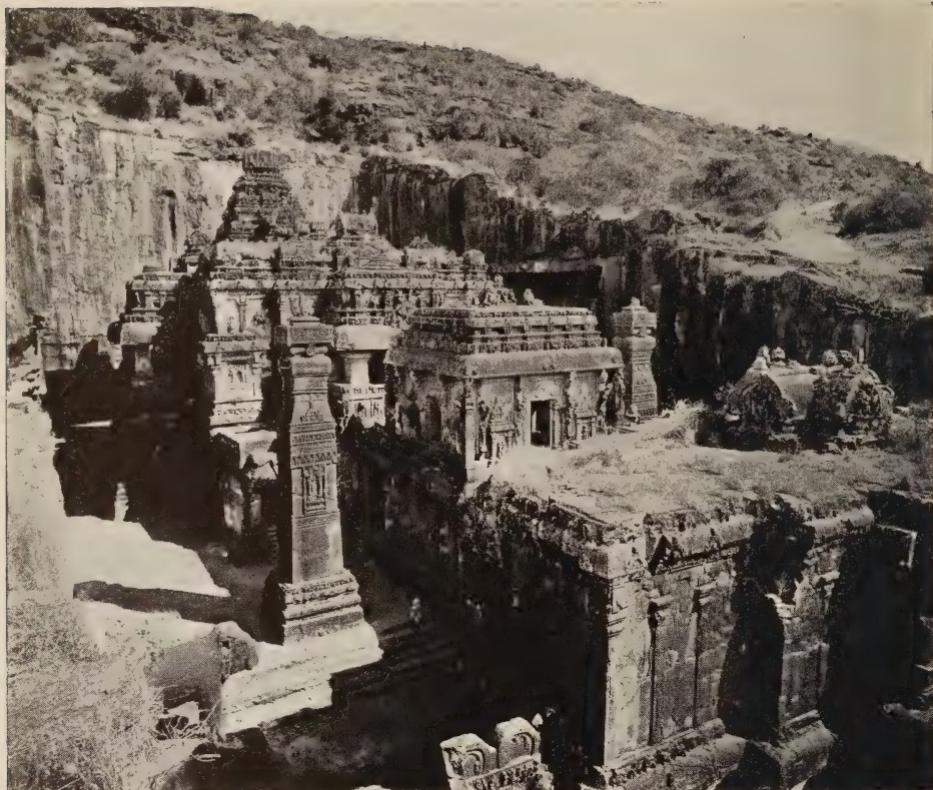
SANCHI STUPA : A GATEWAY

(see page 88)



GOPURAM OF A SOUTH INDIAN TEMPLE

(see page 92)



SIVA'S ROCK-CUT KAILASA AT ELLORA

(see page 96)

of the Brahman priests and protected by special laws. When circumstances favoured the rise of a permanent House of God, the craftsmen were ready to hand.

In the natural religion of the early Aryans fire was the primal wonder, to be worshipped as was the light of the sun, the lightning of the storm or the magic "soma" of water. Even the trees had their vital heat, as the fire-drill revealed. Everywhere experience suggested that heat was the source of life in man and beast. Accordingly, Brahma the creator was symbolised by the rising sun, while Brahma's active principle in the natural world was Sarasvati, the lady of the lotus pool, whose flowers unfolded under the sun's rays. Later Brahma became associated with the Universal Soul of the Brahman philosophers, and men were taught that the individual souls of man and beast changed their shapes until they were merged in Brahma.

"As a goldsmith taking a piece of gold, turns it into newer and more beautiful shapes, so does the Soul of Man, after having thrown off this body and dispelled all ignorance, make unto itself another new and more beautiful shape."

Religious architecture and symbolic sculpture are little concerned with the Vedic ritual of sacrifice ; nor were they much influenced when Buddhism was introduced as a philosophy of personal morality and spiritual culture. At first, Gautama Buddha was conceived as the Great Guru, or Teacher, who, by the virtue of meditation and asceticism, had insight into the mysteries of the universe. The early Buddhists were forbidden to worship graven images, and there was no incentive to build temples. Buddhism, however, was also a democratic revolt against Brahmanism and a re-affirmation of the religious faith in a form fitted for the servile nations, among which the Aryan military colonies were settled. It was when Buddhism became a religion of pilgrimage and image worship that a vigorous school of architecture developed in Northern India. Whereas the Brahmins had preached in Sanscrit—the Aryan Latin—Buddha and his disciples preached in the popular tongue. Thenceforward, the rites and sacraments of Brahma were confined to men of high caste and deep learning, but Buddhism became the religion of the masses, not only of the Aryan conquerors but of the non-Aryans. Buddhism, by refusing to recognise the caste system of the Brahmins, united Aryans and non-Aryans into a single religious community.

Gautama was born about 543 B.C. Later came the Great Awakening whereby Gautama became the Buddha or "The Awakened." He preached in many parts of northern India until his death in 483 B.C., but Buddhism made little progress until 260 B.C., when it was accepted by King Asoka, the Constantine of Northern India. By this time the Aryans had extended their influence over India, except among a few savage tribes in the forest lands or hill country. Irrigation systems had brought prosperity to the dwellers in the Ganges valley ; great codes of criminal and civil law had been evolved ; such sciences as astronomy and philosophy had been developed. The wealth and craft of a vast

territory became available for a great art effort when Chandragupta drove out the Alexandrian Greeks from the Punjab, established himself upon the throne of Magadha, and made Northern India a united empire.

Asoka was the grandson of Chandragupta. He raised Buddhism from a struggling sect to a powerful state religion. Two thousand years after his death the memory of Asoka the Great is still revered wherever Buddhism has flourished. If he was the Constantine of India, he was also its Saint Louis, an example of mercy, charity, truth and purity. As Buddha had made his humanitarian precepts available for all castes, so Asoka ordained a service of goodwill to all people and the possibility of conversion to all sects.

"All men are to me as my children. As I wish my children welfare and prosperity in this and the next world, so I do to men."

Like Constantine and St. Louis of France, Asoka was a mighty builder. As a state religion Buddhism required permanent shrines, and stone architecture took the place of the earlier tabernacles of wood, clay and thatch which had served the Brahman priests. Asoka recruited many builders from Persia, where stone-working was common, and painters, sculptors and wood-carvers were also enlisted in the service of Buddhist art. Rock-cut caves were excavated by Buddhist monks for contemplation and retirement. In course of the centuries these developed into monasteries even larger than the mediæval monasteries of Christendom, each with its central shrine, its assembly hall, its gardens, its lotus pools and its cells, grouped about a central court. Here the youth of the Aryan nobility were taught, and, indeed, students from all parts of the East. In the assembly hall attached to the shrine, the peripatetic preachers of Buddhism met during the rainy season, when travelling was difficult, to recall and develop the teaching of Gautama. A great Buddhist monastery, with maybe 10,000 monks and students, was another Oxford, with its towers and spires, its college halls, its quadrangles and chapels.

THE ARCHITECTURE OF BUDDHISM

The characteristic building of the Asokan age was the *stupa*, a Sanskrit word meaning "mound," which Anglo-Indians often call "tope," from the Pali form "thupa." It is a domed mass of masonry of the pyramid type, set up to enshrine the relics of a saint or hero. Its form can be seen in the typical *stupa* at Kandy, which contains a small altar upon which may usually be seen a few flowers. Buddhism teaches a fondness for flowers, and the Cingalese worshippers make it a habit to pick a few sprays of the strong smelling, creamy temple flower, and lay them upon the altar as a tribute to the Teacher.

Immediately after Gautama's death a demand for concrete objects of veneration associated with the master's teaching arose. Whatever a few enlightened disciples might think, the mass of the people were not impressed by the bare doctrine of liberation from suffering by the Eight-fold Path of right belief, right hopes, right speech, right action,

right life, right desire, right thought and right meditation. If they were to be held to the doctrine of the Buddha it was necessary that the worship of the earlier nature gods should be grafted on to the Buddhist system. The process continued for 1,000 years and resulted in Hinduism.

At the time of Gautama's death, eight tribes built *stupas* for the eight portions into which the Buddha's charred remains were divided. Two other *stupas* were built for the ashes of the funeral pyre and the iron vessel in which the saint's body was cremated. Asoka opened seven of the shrines and distributed the contents over the Buddhist world, and, as a consequence, so the faithful say, 84,000 monuments to the Great Guru were raised. In the centuries after Asoka these *stupas* became sacred shrines, before which the Buddha was commemorated. Originally a royal mausoleum, the *stupa* became an emblem of the union of the Buddha with Eternal Truth. For similar reasons, *stupas* were raised in memory of the abbots of the greater monasteries and other teachers of fame.

Some of these Buddhist *stupas* were over 300 feet high. That of Jetawanarama, in Ceylon, which was built in 88 B.C. by a party of Buddhist monks, has a diameter of 360 feet and was once 405 feet high. An equally famous *stupa* at Anuradhapura rose from a terrace of limestone blocks to a height of 270 feet and enshrined a golden statue of the Buddha, which, with other precious memorials, gave the *stupa* its name of Ruanweli, or Gold Dust. Elsewhere the *stupa* form was made the basis of a vast erection of shrines. The Boro Budur, built by the Hindu kings of the Kailendra dynasty, who reigned in Java between A.D. 750 and 850, covers a low hill 520 feet square, and consists of vast rows and tiers of the bell-shaped *stupas*, each rising to a spire. On the uppermost tier, each pinnacled dome contains the figure of a seated Buddha, while the pilgrim's path to the top lies between carved reliefs, picturing scenes from the saint's life, which measure no less than two miles. When the marvels of mediaeval sculpture at Bourges, Chartres, or Milan touch the imagination of the Christian, it is well to remember these miles of carved reliefs in the Javanese jungles and the great stepped pyramid built up by repeating and ever-repeating the bubble-shaped *stupa* with its aspiring pinnacle. By this time what was best in Buddhism had reached a conception of deity which was very near to that of the Christian God.

In India, the most famous *stupa* is at Sanchi, a seat of Buddhist learning in Vidisha, the Oxford of the State of Eastern Malwa in the days of Asoka. The Sanchi *stupa* was a dome of brick and stone 120 feet in diameter and 54 feet high. The apex of the dome was flattened into a terrace surrounded by a stone railing, within which stood a square altar. On the summit was a place for the cinerary urn, the whole being crowned with a royal umbrella in stone, symbol of the kingly quality of the saint who was honoured by the mausoleum. In the course of centuries, the base was surrounded by a massive stone railing, 10 feet high, forming a processional path around the monument and marking the sacred enclosure. The gates were decorated with sculptures in relief, which may be studied from the collection of casts at the Indian

Museum, South Kensington. Bas-reliefs from the Amaravati *stupa* may be seen at the British Museum. The railings, gateways, and, indeed, whole *stupas* were gradually built or rebuilt by the labour or gifts of pious donors and craftsmen whose zeal was rewarded in many cases by their being allowed to inscribe their names upon the stones they had helped to set in their place. North, South, East and West, at the cardinal points, were triumphal arches of stone, and also votive offerings. At Sanchi, one section was given by the ivory-carvers of Vidisha, while a part of the southern gateway was the gift of the son of the chief craftsman of Raja Siri-Satakani, 50 B.C.

Already Buddhist art had departed widely from the puritanic ideas of Gautama, who taught that painting and sculpture were worldly snares, and forbade "imaginative drawings painted in figures of men and women" in Buddhist monasteries. The influence of Greek sculpture, reaching India by way of Bactria, may have done something to bring about the change. The statuary of Gandhara, the district around the Khyber Pass and, therefore, in close contact with Bactria in Hellenistic times, shows that the early iconic images of the Buddha were based upon the Apollo and Dionysus ideal of the Greek sculptor, with its gently smiling mouth, drooping eyelids and over-fulness of form, rather than upon the Buddha of historic tradition, who was a shaven monk. The influence of Greek sculpture in the treatment of drapery was also marked. This was natural, inasmuch as the Buddhist sculptors were developing an art which had been symbolic and non-personal. They could not fail to borrow elements from Greek, Roman and even Christian sources, where representational art based upon the human figure had been fully tested. Nevertheless, the deeper truth is that Indian sculpture was never Hellenised, and certainly never developed under the guidance of the Greek principle of $\mu\eta\delta\acute{e}v\ \ddot{\alpha}\gamma\acute{a}v$. If Buddhist art is to be understood by the aid of Western analogies, it is to Gothic, rather than to Greek, art we must turn.

The dome of a *stupa*, the symbol of the cosmos, was covered with plaster and painted in fresco like the walls of a mediæval church, the carved stonework of the processional way being also finished in colour, as were Gothic doorways in the Middle Ages. Indeed, the historical and symbolic reliefs upon the Sanchi *stupa* recall Gothic sculpture at every turn. Instead of the Nativity of Christ, Maya, the mother of Gautama, is pictured seated upon a lotus flower, being bathed by the elephants. In place of the ancestors of the Messiah are the Seven Buddhas. There are reliefs which recall events in Asoka's reign, and an elaborate symbolism for the initiated, such as the Wheel which represents the Buddha's first sermon, by which he set in motion the Wheel of the Law, or the throne beneath a pipal tree which represents Gautama himself at the supreme moment when he reached enlightenment.

Like Francis of Assisi, the Buddha founded a monastic system which included a large body of laymen who obeyed a less strict rule than the monks. The monastic organisation was based upon the Sangha, or general assembly of the Aryan clan. Accordingly, a meeting place was attached to the shrine, which served the same purpose as a chapter

house in a mediæval monastery. This *stupa-house* originated from the memorial chapel attached to the mausoleums of Aryan kings. The Aryan mausoleum was made of wood to last the three generations during which the soul of the ruler was journeying to *swarga*. When Buddhism was established as a state religion a permanent assembly hall was required, and large stone buildings were put up. An alternative was to cut the *stupa-house* in a rocky cliff, with an aisle on either side, by which pilgrims could approach the shrine without interrupting the assembly of monks in the *stupa-house*.

At Karle in the Western Ghats there is a famous rock-cut assembly hall, 124 feet in length, 45 feet high, and 25 wide. It resembles a mediæval cathedral with its relic shrine behind the high altar. At Karle, each pilgrim's aisle had its doorway to right and left of the principal entrance leading to the ambulatory around the *stupa*, which was the Buddhist equivalent of the feretory in a Gothic pilgrim church. Passing along the ambulatory from left to right, the Buddhist pilgrims recalled the universal law which directed the sun in its orbit, and therefore guided the faithful to salvation by the Way of Knowledge of the Law. Above the central doorway was carved a sun window, much as a rose or wheel window was cut above the western porch of a Gothic cathedral. On the facade, too, was a wooden music-gallery, from which a drum, the equivalent of the Christian bell, announced a meeting of the Buddhist Sangha. Entering the great nave, decked with its painted banners and swinging lamps, the monks had on left and right a row of lotus columns which extended from the doorway to the *stupa* shrine.

Each of the thirty columns at Karle is octagonal in shape, and is surrounded by an inverted lotus flower and a carving representing the heavenly home of the Devas. From their chariots, the Devas, the shining ones, are watching over and ordering the decisions of the yellow-robed monks who sit in consultation in the chapter-house below. In Buddhist symbolism, the pillar is the mystic lotus plant supported by the holy mountain and keeping the balance of the universe. The pillar with its decoration was derived from the carved sacrificial posts set up near the tabernacles to the Fire Spirit in Vedic times. The lotus is the blue canopy of the heavens with the sun as its golden pericarp, and Indian sculptors carved the open flower with turned-down petals in preference to the lotus-bud of Egypt. Mr. Havell recalls that the Indian carvers of the early Buddhist ages, understanding the symbolism of the lotus as the emblem of the vault of the heavens, decorated the lotus pillar with the characteristic pointed petals of the flower, and indicated the stamens and seed vessels, whereas the Persian and Greek carvers conventionalised the decoration until resemblance to the lotus was lost, and even added acanthus leaves to the inverted flower. The lotus *motif* occurs as frequently in Buddhist and Hindu art as does the cross in Christian art.

The frescoes in the rock-cut temples at Ajanta are familiar to Londoners through Lady Herringham's copies at South Kensington, and the remarkable reproductions prepared by the Nizam of Hyderabad (Oxford Press). Painted between the first and the seventh century

after Christ, they cover a period when Buddhist art was influencing all Eastern Asia. The rock-chambers recall an apsed Romanesque church, but the frescoes at Ajanta are more perfect than any wall-paintings in our own Norman churches can have been, ranking with the masterpieces of Italy and recalling such a painter as Sodoma. The tender and languid grace of the scenes of human and animal life, the variety of gesture and attitude in the grouping and the sensuous charm of the designs, place the Ajanta cave frescoes among the outstanding decorative paintings of all time. The painters represented either episodes in the mystic and historical life of the Buddha, or scenes in the Paradise where the Buddhas and the Bodhisattvas reign. A figure of appealing beauty is that representing Gautama looking down with pity upon the world he is about to enter.

Lastly, there are the statues of the Buddha himself and his emanations, the Bodhisattvas, embodiments of divine love and wisdom, and symbols of the spiritual rebirth promised to the faithful. Such statues are a central figure in every Buddhist decorative scheme. In Indian belief, the body, by meditation and ascetism, is purified from the dross of earthly existence. It is this unsullied body which is represented in the statues of the Buddhas, the Bodhisattvas and the Conquerors of the Jain religion. The shoulders are broad, the waist narrow and the limbs well-rounded, indications of physical perfection which differ from the Hellenic canon, but were instinct with meaning for the Buddhist and Hindu. On the neck are three lines of luck ; the eyebrows are joined ; the third eye of spiritual vision is represented in the centre of the forehead, while the bump of wisdom is to be seen on the top of the head. At times the Buddha is shown in the Yoga trance, or, it may be, enthroned, expounding his doctrines to a band of disciples who sit at his feet worshipping the Wheel of the Law. As in the Byzantine canon every pose has meaning. Thus, the hands may be in the "turning the Wheel of the Law" position, or the right hand with the palm turned outwards may make the gesture of charity. Or again, the Buddha, as Guru, may stand erect with right hand raised, dispelling fear, as in the copper statue at Birmingham.

The religion of the Jains (the Quakers of India), like Buddhism, was in origin a variation upon Brahmanism. Nataputta, the founder, lived for twelve years as a naked ascetic before he arrived at full knowledge. The Jains look forward to a state in which the souls of men will be released from earthly entanglements, and they pay special reverence to super-men (world-conquerors), who live in eternal purity, and are entitled to the veneration of mankind. The five commandments of the Jain monk are : Thou shalt not kill ; thou shalt not lie ; thou shalt not steal ; thou shalt refrain from intercourse with worldly relations ; and, thou shalt call nothing thine own. Such a religion released large sums for the religious art fund. The best of the Jain temples date from between A.D. 1000 and 1300, and consisted of a roofed shrine containing a naked (sky-clad) and cross-legged image of one of the twenty-four world-conquerors. Above the shrine was a dome and in front a columnar hall. The two temples on Mount Abu, in

the Rajputana desert, are built of white marble and stand on a granite plateau 4,000 feet above sea level. The very carriage of the stone to such a place constitutes a wonder. The portico hall, built by Vimala Sat in A.D. 1032, is lavishly decorated with carving, each column having raking struts of marble, while the dome has sculptured pendants, which recall the ceiling carving in a late perpendicular church, such as Henry VII.'s chapel at Westminster. The Jains regard temple-building as a social virtue, justifying the hope in a life beyond the grave. Accordingly, a temple is built not for congregational use, but for its own sake, in some secluded valley or on a hill-top. There may be 200 or more image-cells in a Jain temple. In the City of the Gods, which the Jains built at Palitana, in Gujarat, there are eleven groups of these dedicatory temples and 500 shrines.

THE RISE OF HINDUISM

As the power of the Asokan dynasty declined the influence of Buddhism as a state religion waned. The tendency was accompanied by a revival of Vedic tradition and the power of the Brahman priesthood. For 1,000 years Brahmanism was being influenced by Buddhism, and Buddhism by Brahmanism and the demon-worship of the lower castes, until a new faith, Hinduism, was evolved. The Asokan kings were followed by the Andhra chiefs, who conquered Magadha in 27 B.C. Then came the Gupta kings, mighty monarchs in their day, in spite of struggles which such enemies as the Bactrian Greeks and the White Huns, who conquered a kingdom for themselves in the Punjab in the middle of the fifth century. Each new race of invaders found it possible to make use of Brahmanism, Buddhism or Jainism for state purposes, but the final result of the 1,000 years of stress was the establishment of Hinduism. Between A.D. 500 and 800 was the age of Vikramaditya, the Charles the Great of India, who stemmed the tide of foreign invasion and revived literature and art. Vikramaditya did not persecute the Buddhists, but his sympathies were in favour of Hinduism. Then came the Dark Ages of India between A.D. 800 and 1200, when the Moslem invaders were threatening Northern India, and Aryan civilisation was preserved by the energy and courage of the Rajput princes, some of whom had been established in the Deccan from the fifth century A.D.

At the same time the Aryan religion and civilisation extended southward under Moslem pressure, particularly at the time of the Twelve Expeditions of Mahmud of Ghani between 1001 and 1030, when many temples were destroyed and the masses of the people of Northern India enslaved. The Rajputs tended to favour the Hindu faith, and Buddhism died out. At present, out of 350,000,000 people in India, 260,000,000 are Hindus, 75,000,000 are Moslems, and only 11,000,000 are Buddhists. The popularity of Buddhism ended when Hinduism established itself about A.D. 750 as a religion of image worship and pilgrimage. In place of sacrifices to the Fire-Spirit and other nature deities of the Vedic system, Hinduism taught the threefold

power of the Supreme Being—Creation, Preservation and Destruction. Brahma was still the first person of the Trinity, but, in practice, Vishnu the Preserver, and Siva the Destroyer, were more honoured. Each had innumerable emanations, all of which became personified in course of time, and therefore fit subjects for decorative sculpture. With the decay of monastic life, the monastic buildings were used as pilgrims' hostels, as the guest-houses of rulers, as political debating halls and for other semi-secular purposes, just as the mediaeval monasteries were used in Western Europe after the Reformation.

To-day, the worship of Brahma has been merged in that of Siva and Vishnu, and the characteristic temples of India are associated with Vishnu the Preserver, or Siva the Destroyer. A temple of Siva is the symbol of the Lord of Death, who dwells amid the snows of the Himalayas. As the Lord of Death, Siva has the setting sun and the waning moon as his emblems, while the eight-armed Vishnu, the triumphant warrior king, upholds the sphere of the sky and bears the mace, the sword, the shield and the war-trumpet of power. Vishnu and Siva can be differentiated, but the deeper truth is that the Hindu worships Vishnu as Siva, and Siva as Vishnu. At times the Hindu architect combines the pyramid-like *sikhara* with the *stupa*, as though to emphasise the union of Vishnu with Siva and both with Brahma. Examples of this union of symbolism are to be found in the Chalukyan architecture of the Deccan, dating from the seventh century A.D., where the shrine was crowned with the stupa-like dome of Siva, while the tower with its lotus-flower recalled the *sikhara* of Vishnu. The shrine of the great temple to Vishnu and Siva at Ittagi has a trefoil form, as though to recall the Trinity of the Hindu Gods.

Hindu ritual being non-congregational, Hinduism does not necessarily require more than a shrine for the deity and a porch for the priest who is in charge of the shrine. A conical tower capped by the blue lotus of a world ruler—the *sikhara*—is the characteristic feature of a house of Vishnu, a shrine crowned by a curvilinear steeple, whereas the dome of Siva is capped by the jar of immortality, which replaced the relic urn and royal umbrella above the Buddhist *stupa*. Both Vishnu and Siva were personifications of mountains in the times when the Aryan pastoralists were mountain worshippers. Accordingly, the dome of a Siva temple represents Kailasa, the mountain of the god amid the Himalayan snows, though, for the Southern Indian, the home of Siva was rather the Western Ghats, where, as Mr. Havell has said, the faithful could hear Siva's drum, the time-beat of the ocean, and watch the sun sinking into the jaws of the dragon of the nether world. Vishnu's *sikhara* was identified with the holy mountain Mandara, with which Vishnu stirred the cosmic waters and brewed the nectar of everlasting life. Again, within the *sikhara* may stand an image of Vishnu, as another Hercules or Atlas, his body, rigidly upright, forming the mystic Mount Meru around which the universe revolves. From Vishnu's high-peaked crown flash the jewels of the dawn, the moon and the sunset. The basic element in the *sikhara* was usually a square shrine, but sanctuaries and enclosures were added, and as the steeple increased in height

small replicas were added on all sides. Bhuvaneshvar, the capital of Orissa, situated in a hill country with caves in which Buddhist and Jain hermits lived, is famous for its *sikhara* temples. The central tower of the Linga-raj temple at Bhuvaneshvar is 180 feet high, and exquisite alike in design, craftsmanship and decoration. It dates from about the eighth or ninth century A.D., when the Lion dynasty ruled in Orissa.

The ruined city of Khajuraho, the capital of the Chandela dynasty in central India, is also famous for its temples in honour of Vishnu. The Chaturbhuj temple has three pillared halls in front of the central shrine, one an assembly hall, the second a dancing hall, and the third an entrance porch, where worshippers could make offerings of grain, fruit and other things. All the halls are roofed with conical domes built up by concentric rings, and carved internally to represent the mystic lotus of Vishnu, which is the roof of the world.

The origin of the worship of Vishnu was the feudal devotion of a warrior to his chief, of a son to his father. It was the religion of the fighting caste, which remained to combat the Moslems in Northern India when the peaceful Buddhist and Brahman monks and scholars fled south, bearing with them the cult which was to develop into the worship of Siva. For this reason the *sikhara* of Vishnu, the conqueror, is popular in Northern and Central India, whereas the dome temples of Siva are common in the Dravidian south, where they witness to the Aryan flight southwards after A.D. 1000, owing to the Moslem invasions.

At times, as has been said, Siva is associated with the ritual of death, and is the embodiment of the destructive element in nature, bearing the boar's tusks, a sword, and the cup fashioned from a human skull. But more generally Siva is the deity who teaches wisdom and the arts. The holy rivers which give life to the world have their source in the god's hair ; he controls the forces of Nature by the power of his thought ; he is the god of the dance, entering the halls of the world, as day by day, at dawn, he enters his temple by way of the arch of radiance. This popular cult of Siva, bringing men salvation by knowledge, superseded the cult of Siva, the Death God, and led to the wonderful Siva temples which were built under Brahman instruction among the non-Aryan people of Southern India. The central shrine was usually square or octagonal. Upon this central point the builders piled replicas until an imposing pyramid was erected, rising tier upon tier, the whole adorned with sculpture and furnished with gateways also rich in sculptured decoration. At Madura, in Southern India, the temple of Siva is 25 acres in extent and the ten gate-towers are from 100 to 200 feet high. The Hall of a Thousand Columns is lavishly carved, each column being hewn from a single block of stone. Very characteristic, too, is the *gopuram*, or gateway, leading to an enclosure in a Southern Indian temple, which Mr. Havell regards as an adaptation of the fort from which the ancient Aryan villagers kept guard over the cattle feeding on the grazing commons without the walls. The word *gopuram* means "cow fort" and that at Ramnad is of great size and is covered with symbolic sculpture.

The best of the sculpture in honour of Siva belongs to the time of the

Chola Empire, established east, south and north of the Kaveri River in Southern India, which had its capital at Kanchi. Between the ninth and the thirteenth centuries many craftsmen who had worked on Buddhist and Brahman temples in the north came south owing to the disturbed conditions which followed the Moslem invasions. In sculpture, Siva is usually associated with Parvati, the maiden of the Spring, who at the time of the melting of the mountain snows, drew the god from his meditations in his icy home and became Siva's bride. The statues of Parvati have the right hand bent to receive the daily gifts of a lotus or blue lily.

Unique in Indian statuary, and comparable in wealth and significance of imagery with anything in religious art, are the bronze figures of Siva Nataraja, Lord of the Dancing Sunbeams. Siva, the teacher of Spiritual Wisdom, which in Hindu belief is to be found in its supreme form in the dissolution of death, is pictured passing under the arch of radiance to eternal bliss. The gateway of death and life is fashioned from the flames of the setting sun, and mingling with them is the crocodile-dragon of earthly creation. Clad only in the symbolic tiger skin of the Brahman ascetic, Siva moves in an ecstasy of creative fervour and crushes under foot the demon-dwarf, Apasmara. With the upraised "lotus foot," which once struck Kala, the death god, senseless, Siva touches the all-revealing circle of flames. One of the four hands of the god is in the attitude of protection ; another bears a portion of the fire of sacrifice ; a third moves the rattle-drum which is the symbol of the Redeeming Word for the devout Buddhist or Hindu ; while the fourth expresses the gracious poise which is the source of divine knowledge and beauty. The swirl of the god's hair, recalling the life-giving power of the creative waters from which Siva rises at dawn and into which he sinks each day at sunset, adds to the ecstatic rhythm of the dancing form, which is at once destroyer and life-giver to everything that has its being in the cosmic elements—earth, water, fire, air and ether. A prayer which is still chanted in the temples of Southern India to the praise of Siva tells what a statue of the Nataraja may mean to the faithful :

" O Lord of the Dancing Sunbeams, the beat of whose drum calls men from all earthly things and drives away the fears of the humble and offers them the comfort of divine love ; who points with his protecting hand to his uplifted lotus-foot as the sure refuge of salvation ; who carries the sacrificial fire and dances as he enters the Hall of Eternal Bliss ; O Lord protect us ! "

According to the Hindus, Benares was built by Siva, and the Golden Temple of Siva is the holiest in the sacred city. " All who die within the walls of Benares are blessed, and those who are found within it at the day of judgment shall be blessed a thousand fold." Consequently, Hindus desire to be cremated at Benares, on the banks of the Ganges, that their ashes may be cast into the sin-cleansing stream. Benares, with its 1,500 temples and mosques, is the Mecca of India, and a pilgrimage to Benares is the Indian equivalent of a journey to Rome in the Middle Ages, as a visit to one of the great temples of Siva, the

Destroyer, or Vishnu, the Preserver, is the Hindu equivalent of a pilgrimage to the shrine of St. Thomas, St. Edward or St. Audrey in the Middle Ages.

The Silpa-Sastras, canonical books of the Indian religious builders and craftsmen, set out the appropriate forms and symbolism of a Hindu House of God. Whereas a shrine of Brahma was open on all four sides, a temple of Vishnu faced east, and that of Siva, west. The square shaft of a temple pillar signified Brahma worship, an octagonal shaft Vishnu worship, and a sixteen-sided shaft Siva worship. At no time had the Hindu architect any liking for the arch, preferring to span a space by means of a beam. If the space was large, he spanned it by placing several beams one over the other, so that each projected beyond that just below, until the beams joined. There was thus the appearance of an arch, but not a true arch, for the beams and stones were all laid horizontally.

If the architectural form and symbolism of a Hindu temple were set out in the canonical books of the Indian builders, so was the due conduct of the individual craftsman. It was ordained that the Hindu craftsman should be versed in the Vedic Mantras. He was to be one " who wears a sacred thread, a necklace of sacred beads and a ring of *Kusha* grass upon his finger ; one delighting in the worship of God, faithful to his wife, avoiding strange women, true to his family, of a pure heart and virtuous, chanting the Vedas, constant in the performance of ceremonial duties, piously acquiring a knowledge of various sciences —such a man is, in truth, a craftsman."

At times, the very situation of a shrine had symbolic significance. In India, the most sacred places of worship were built among the hills under a rocky scarp, over which a mountain torrent poured in a crescent-shaped cascade, recalling for the pilgrim the Ganges at Hardwar, as the river passes from the forest-clad heights of the Himalayas into the Indian plain. Thus a famous pilgrim's temple was built at Ellora, near Ajanta, beside a waterfall which flowed over a crescent-shaped scarp in the Ghats of Mid-India. The *stupa-house* was dedicated to Vishvakarma, the architect of the Gods, and patron saint of the Buddhist and Hindu builder. This hall served as a guildhall for the masons who cut the rock temples and pilgrim-shelters of Ellora. As in mediæval Europe, it was common for families of craftsmen to devote their lives to the cutting of a rock-temple, and the guilds of master builders secured charters and privileges from Indian princes and abbots, as did the craft-guilds in Italy, France and Germany in Romanesque and Gothic times. The monastery at Ajanta, with its twenty-six shrines and chapter houses, dates from the first century B.C. to the seventh century A.D. By the end of the period the solid dome of the early *stupa* had become a structural dome of lotus-leaf form, providing a roof for the relic chamber, which had previously been hidden in the solid brick. The Buddha was now worshipped as a god, not merely revered as an inspired teacher. He had taken to himself many attributes of the earlier nature deities of the Vedas. Standing in the rocky ravine, during the rainy season the pilgrims bathed in the cascade which poured over the scarp in

crescent form and could persuade themselves that this was in truth the water of the Ganges as it poured over the sun god's brow.

For over a mile the scarp of rock at Ellora is carved into temples and monasteries. At one spot, cutting into the hillside, the builders left a mass of rock which they carved into a vast double temple. The Kailasa temple at Ellora was commenced in A.D. 760 by Krishna I., and was 250 years in the building. The central shrine rises from a rock plinth 27 feet in height, carved with a frieze of elephants standing shoulder to shoulder, so that they seem to bear the temple of the god upon their backs. The Kailasa took its name from the snow-clad palace of Siva and was a centre of Siva worship in the Deccan until the Moslem conquests in the thirteenth century, when the master builders and carvers of Ellora fled south, as centuries earlier they had taken refuge in the Deccan. Apart from the central shrine in honour of Siva there are shrines to Ganesh, Siva's son, and to Parvati, the Universal Mother, Siva's wife. An assembly hall 53 feet square, a processional way, terraced cloisters and pavilions are all carved from the rock of the Ghats.

Enough has been said to show that an Indian temple, with its innumerable statues and reliefs and its vast pyramidal towers, cannot be judged as an ordered architectural scheme. It has not the science of a Greek temple. In this the Indian temple is true to its source. Hinduism rejects the reality of the outer world, but is firmly convinced of the reality of the inner world of the spirit. Building and sculpture alike form a vast fabric of symbolism in which every pose and gesture in the carved figure has its meaning for the initiates. Only those who have had the vision can fully understand. In the Agnipurana, the image-maker is enjoined on the night before beginning his work, and after ceremonial purification, to pray :

“ O thou Lord of all Gods, teach me in dreams how to carry out all the work I have in mind.”

Most of the spiritual impulses which have quickened the soul of Europe have come from the East, but, in general, intellectual conceptions have arisen in the western world, where active thought is preferred to reliance upon the faculty of passive intuition. Europeans tend to regard man as the central fact in the universe, whereas the typical Indian intellect sees human personality as “ a dewdrop mirroring the world about it for a while,” and then in an instant of time ceasing to be, only to be shaped to yet another of the infinite possibilities of existence. For the Western Aryan, the material interprets the spiritual ; for the Indian, the material hides the spiritual. Form, which is the basis of western art, is thus without significance for the Indian artist. Passion, which we regard as evidence of vitality, the Indian regards as evidence of disunion from the realities of the spirit. Calm and perfect knowledge come from the subjugation of passion. Nor has the Indian been able to persuade himself of the essential harmony of Nature or the adaptability of Nature to human needs. How can he ? Ninety Indians out

of a hundred are agriculturists. At times they see Nature as the giver of a bounteous harvest ; but more often Nature is the Destroyer.

So in the realm of action ; whereas the Western Aryan is active, the Indian is passive. This is one Hindu proverb : " It is better to walk than to run, better to stand than to walk, better to sit than to stand, better to lie down than to sit, but death is best of all." Only by ceasing to be man does the Indian win deliverance. Whereas the Western European considers that all effort should devote itself to the task of living in time, the Indian chooses to live in eternity. Thus must the Indian House of God be judged.

The abiding interest of Indian architecture and sculpture lies in this very fact that, here, humanity has tested certain deep-lying truths which the Western mind chooses to disregard. Hindu architecture is characterised by an over-wishiness of decoration, which suggests that it was conditioned by emotional judgment rather than by what Western folk, bred in the Greek tradition, call the intellect. Philosophical ideas of deep significance have operated to determine the types of Buddhist and Hindu temple architecture, but always the effort to express the serenity of Nirvana has been hampered by the equally insistent desire to suggest the divine energy pulsing through created things, which to the Indian mind must equally find expression in any art which seeks to be religious. Hence Indian temple architecture relies on size, variety and colour, not on ordered form ; form and order being essentially the discoveries of men who are free to say what they will, when they will, and how they will. Through the ages, the Indian peasant has lived at the mercy of Nature and at the mercy of the ruler set over him by natural forces. His only release in life is his hope of freedom after death. So, if he may seem to the European to have paid a heavy price, he has not been without his reward. It has been given to his race to discover and express truths which the west is but slowly learning to utilise. Vistas of beauty have opened before the Indian of which Western art knows little. He sees natural forms as incarnations of ideas, and it is these ideas rather than the natural forms that he seeks to express.

Indian architecture is a setting for a vast complication of sculptural symbolism, but the interesting thing is that this sculpture is itself symbolic of an overworld of spiritual forces which, in the Indian view, make the world of our day-to-day experience little more than a shadowy illusion. Unlike Greek and Gothic art, Indian sculpture does not seek to express or interpret the life of mortal humanity. Consequently, it lacks the logic and science which give the deepest significance to a Doric temple or a Gothic cathedral. Because the Greek believed that all effort should centre upon living in time, his architecture was of the earth. But the Indian regards earthly activities as belonging to a lower order of things and pardonable only in undeveloped man. In his religious exercises, he seeks an escape from life and from time. Nevertheless, to the Hindu, every image and every pose of every image, has its meaning. If the Western Aryan cannot wholly understand and approve, it is, in part, his misfortune. As Gopinatha Rao has said in his " Elements of Hindu Iconography," the Hindu sculptor seeks forms

which transcend the limits of the ordinary human body. He does this in order to suggest something beyond the form of earthly things. Perhaps the wonder is that, with ideas so different from those controlling Western artists, there is so much in the East which the Western mind can admire and understand.

BUDDHISM IN THE FAR EAST

A.D. 800 is the date of Charles the Great and the beginnings of Romanesque architecture and sculpture in Western Europe. In India, by this time, Buddhism had fallen from its apogee, but only that it might pass to other lands and establish itself in Ceylon, Burma, Siam, China and Japan, the nations which form the mainstay of Buddhism to-day. Indian forms of worship have been better preserved in Ceylon, Burma and Siam than in Tibet, China and Japan, so that it is customary to speak of a Northern and a Southern Buddhism. The missionary efforts of Indian Buddhists commenced many centuries before the rise of Hinduism, and one of the most famous temples in Indo-China, the Shwe Dagon Pagoda at Rangoon, is fabled to have been established while Buddha was still living. It was built to enshrine eight hairs given by Gautama himself to two Buddhist merchants. They were brothers and had gone to Benares in charge of 500 carts. On their journey they met the Buddha in the forest and, in exchange for a gift of honey, the Burmese merchants received the holy hairs. Returning to Rangoon, then a mere village, the brothers sought out the low conical hill on which the Shwe Dagon stands, and digging down to make a foundation for their little shrine, they discovered that the place was already sanctified to Buddhism, as relics of Gautama's three predecessors had been buried there—the drinking cup of Kaukkathan, the robe of Gawnagong and the staff of Kathapa. The original shrine was no more than 27 feet high, but has been recased again and again, so that the bell-shaped pagoda is now 1,350 feet in circumference and over 300 feet high. Built of brick, it is covered with pure leaf-gold from base to summit, and is crowned by a glittering umbrella of state, the "hti," adorned with jewelled bells. Not only does the central shrine maintain the form of the primitive Buddhist *stupa*, but the original relic chamber is surrounded with miniature *stupas*, each with its golden spire, most of them containing an alabaster statue of the Great Guru. In its present form the Shwe Dagon dates from A.D. 1564.

Apart from Rangoon, the most famous Buddhist shrines in Burma are to be found at Pagan on the Irawadi, which was the capital in the eleventh and twelfth centuries A.D. The temple of Ananda is a wondrous erection of brick in seven storeys, the central square being 200 feet and furnished with four porches on each face. In the centre the tower soars to a height of 183 feet and is crowned by a pinnacled "hti." Four statues of the Buddha, each 30 feet high, are set in the four transepts of the temple, representing the four incarnations, Kaukkathan, Gawnagong, Kathapa and Gautama himself. The thousands of carved reliefs

and images which decorate the Ananda pagoda picture scenes from the life of the Buddha. Only a great pilgrim church of Western Christendom with its carved porches, its shrines, painted walls and windows, can suggest the wealth of effort which the warrior kings of Burma expended upon temple adornment in the twelfth century. There were struggles with China and invasions from Ceylon and India to be faced, but when the Buddhists of Burma were able to secure temporary peace these wondrous memorials arose.

There is little doubt that Ceylon was the first country beyond the borders of India converted to Buddhism, and here, too, the *stupa* was the architectural unit. In Ceylon, *stupas* are known as *dagobas* and are vast, dome-shaped piles of brick, the most remarkable being those already mentioned in the ancient jungle-town of Anuradhapura. Cingalese history begins with the introduction of Buddhism to the island in the times of King Tissa, a contemporary of Asoka, and the conversion of Ceylon seems to have been due to a mission sent by the Emperor Asoka himself. The foundation of the rock-hewn temple at Isurumuniya, with its grotesque frescoes and reliefs, dates from the reign of King Tissa. With Buddhism came relic worship, and legend tells that, 150 or 200 years after Tissa, King Dutugemunu required his court architect to furnish a design for a valued relic. Plunging his hand into a golden water bowl, the architect pointed to a floating bubble which arose and suggested it should be used as a model for the shrine. *Dagobas* of bubble form may be found by the thousand in Ceylon to-day. Torn asunder by the roots of the jungle growth, they have largely lost their form but they are still an emblem of the union of man with eternity, through the teaching of Gautama. In the Ruanweli *stupa*, the Gold-dust Dagoba, once stood a golden statue of the Buddha and around were cut three procession ways, by which the pilgrims approached the central shrine. The enclosure wall, 100 feet broad, was carved with elephants' heads, covered with a marble-like cement, and fitted with real ivory tusks. Within the wall was a second platform 500 feet broad supported by 400 stone elephants each 9 feet high, the head and forequarters alone being visible. Upon this platform rose the bubble-shaped *stupa*, which still lifts its rounded form above the tangle of the forest. Many of the *dagobas* were built by prisoners of war taken by the Cingalese conquerors in Dravidian India. As with the temples of Pagan, the key to their mystery is some mighty dynasty which has passed beyond memory and almost beyond historical research.

Another example of this dynastic factor conditioning a House of God may be found in the strange Khmer civilisation, enshrined in the ruined temples of Cambodia, in French Indo-China. It has been suggested that the Khmer civilisation was Indian in origin and that the founders of the dynasty were Brahmans from Delhi. Angkor Thom, the Khmer capital, is now a jungle ruin two miles square which seems to date from about A.D. 850. By the fourteenth or fifteenth century (the dates are highly debatable), the Khmer civilisation declined and the jungle resumed its own. Possibly natural changes brought about a shortage of water and Cambodia was no longer able to support the

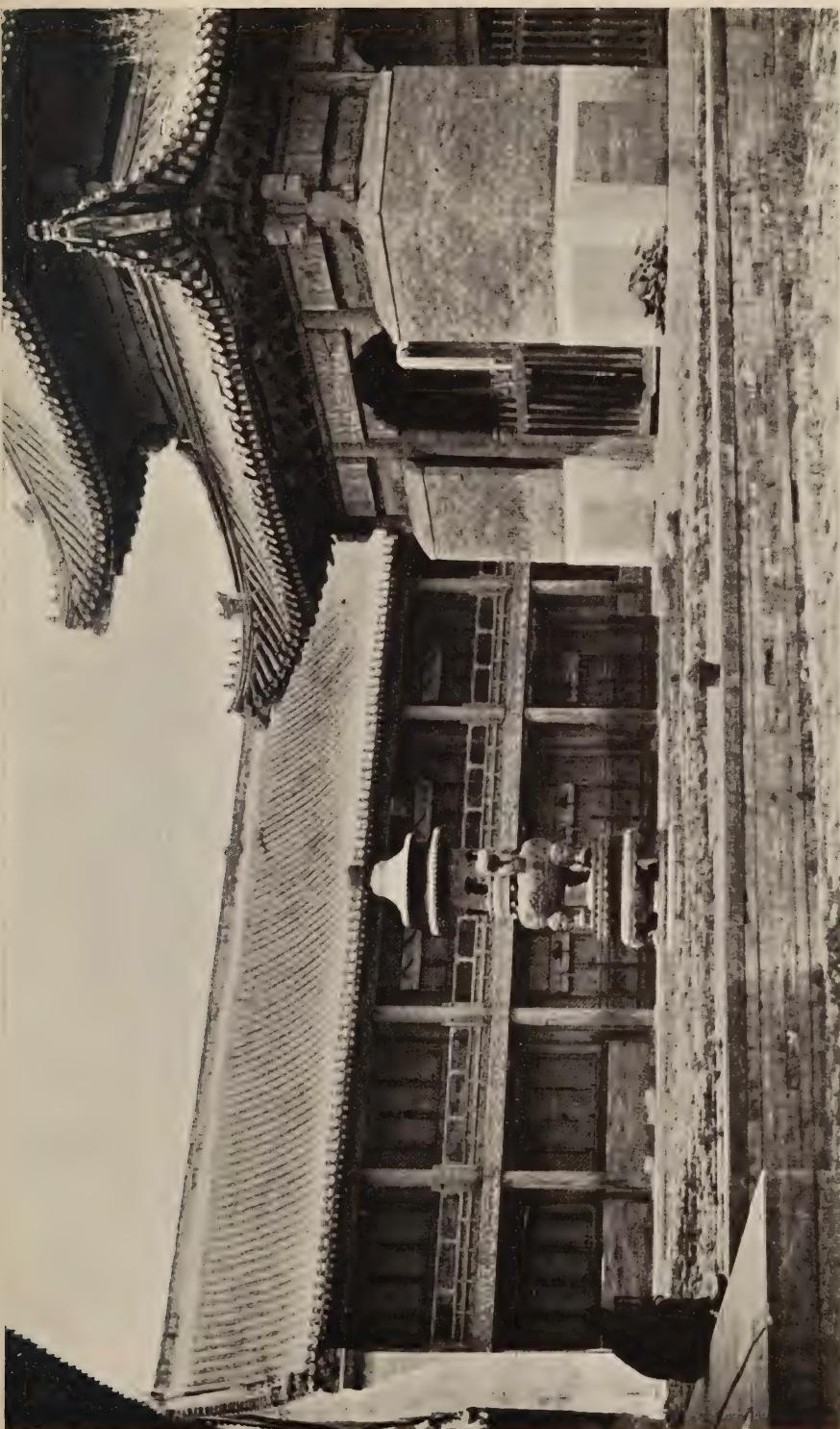
populations necessary for a mighty monarchy. It may even be that Angkor Thom was abandoned, as Sir Hugh Clifford has suggested, at the behest of the gods, the entire population forsaking their cities (as Israel followed Moses from Egypt), and resigning themselves to life in the thatched huts which suffice for the Cambodians to-day. Be this as it may, there was a time when a kingly or priestly power controlled an art fund ample enough to build the Angkor Vat, a temple 796 feet long and 588 feet broad, with a central pagoda which still rises 250 feet above the jungle growth, and having at its angles four other towers, each 150 feet in height. Some of the sandstone blocks weigh eight tons apiece and were quarried 25 miles away, raising the problem of transport which still astonishes the world in Ancient Egypt. Yet the nicety of Khmer craft was such that a line ruled on a piece of tracing paper can be laid above the junction of the stones and will be found to coincide precisely with the masonry work below. Almost every stone is carved with dragons, beasts and Buddhas, Brahman and Buddhist symbols appearing side by side. Yet, in spite of the profusion of ornament, the carving achieves a harmony which is rare indeed in similar Indian work. Angkor Vat, as Sir Hugh Clifford has said, is not only an expression of tremendous energy but of a passionate love of art. He might have added that the mighty jungle ruin also witnesses to the potency of the god-idea, whenever social and political conditions allow of faith finding expression in during stone.

As Buddhism spread eastward, so it spread north and west. Asoka himself annexed Kashmir and Gandhara, bringing Buddhist art into contact with the architecture and sculpture of Hellenistic Greece. Since 1923 a French expedition has been working in Afghanistan under the leadership of Professor Foucher and discoveries of rich significance have been made at Djelalabad, at Kabul, in the Kabul Valley and at Bamiyan, near the foot of the Hindu Kush, showing the early progress of Buddhism into Central Asia. A fourth century pilgrim, Fa-Hian, records that there was a bone from Buddha's skull at Hadda, near Djelalabad, which was shown to pilgrims upon a golden throne and under a bell of crystal. The *stupas* which encircled Djelalabad gave the place its old-time name, "The Crown of Pearls." Professor Foucher tells that at Char-i-Gholghola, in the Bamiyan valley, the rose-tinted cliff of the Great Images is honeycombed with thousands of artificial caves, monasteries, shrines and pilgrim shelters. The historian Abul Fazl tells that 12,000 artificial caves were cut in the valley in the course of several centuries. Pilgrims were attracted to Char-i-Gholghola by the fame of the colossal statues of Buddha, one of which was 198 feet high and another 114 feet. They were hewn in the rough and the form was then modelled upon the rock core by the use of limestone plaster. Lastly, the figures were covered with a layer of metal, added with such skill that the pilgrims were tempted to believe that the Buddhas had actually been cast in bronze.

Buddhism established itself in China during the fourth century after Christ. By 630, there were 3,716 monasteries in the empire. In the sixth century Buddhism was established in Japan and a century later

(see page 102)

A BUDDHIST TEMPLE, PEKING





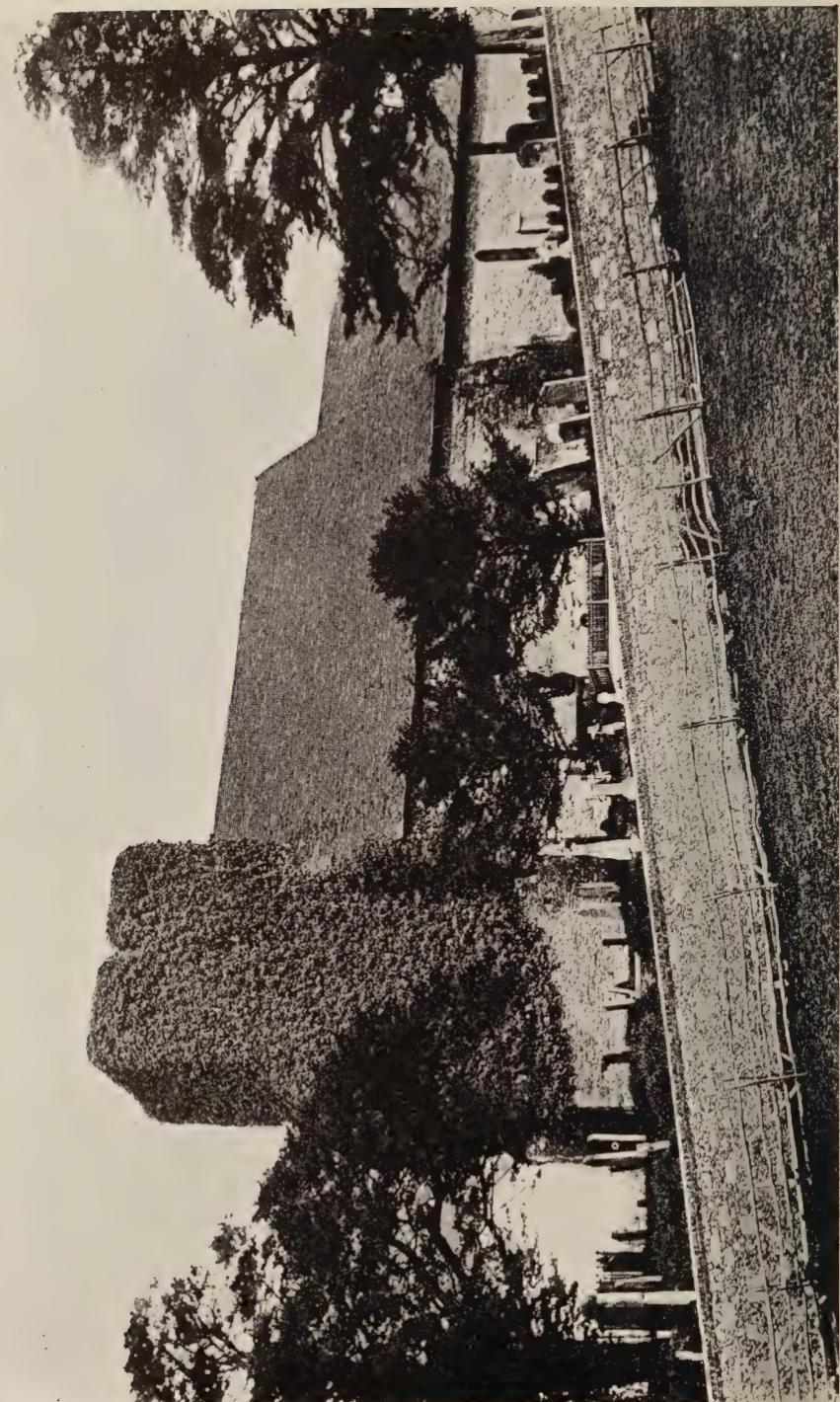
TUAN FANG ALTARPIECE
(Museum of Fine Arts, Boston)

(see page 104)

(see page 106)

A JAPANESE TEMPLE





ST. MARTIN'S, CANTERBURY

(see page 114)

in Tibet. The date of the actual introduction of Buddhism into China, however, was earlier and is put at A.D. 67, when the Emperor Ming Ti, seeing in a dream a golden figure floating in a halo of light across his pavilion, enquired of his wise men who this might be. He was told, "The Buddha." Ming Ti sent a commission to India and they returned with Sanskrit books and craftsmen who assisted to build the White Horse Temple, in memory of the horse which brought the first relics of the Buddha to China. In the fourth century, when the Chinese were allowed to become Buddhist clergy, the religion was strongly established and, in T'ang times, China rather than India was the centre of Buddhism. In time, however, Chinese Buddhism degenerated into a system of magic, leaving the rationalism of Confucius as the chief expression of the Chinese religious outlook. Nevertheless, between A.D. 500 and A.D. 1278, when the Sung dynasty ended, many Buddhist monasteries and pagodas were built and many rock shrines and statues were fashioned. The journeys of Sir Aurel Stein have added important facts regarding early Buddhist art, which still require embodying into unified knowledge. Not the least interesting of the problems are concerned with the paintings on silk which Sir Aurel Stein discovered at Tun-Huang on the western borders of Kansu in 1906-8, in a rock-cut chapel which had been walled up since the eleventh century. They belong to the T'ang period and suggest comparisons with the frescoes of the Ajanta caves, but in place of the tender humanity of the Ajanta frescoes, there is a grave serenity which witnesses to a basic difference between the mood of the Buddhist in India and China. Facts regarding this early Buddhist art in China will be found in Sir Aurel Stein's *Serindia*, and a volume of large reproductions by Sir Aurel Stein and Mr. Binyon, *The Thousand Buddhas*.

Though for some centuries social and political conditions favoured religious painting and sculpture, architecture was not so aided. Indeed, circumstances in China have never favoured a vigorous building effort such as that which produced the temples of Egypt or India, or the churches of the Gothic age.

As a system of moral teaching Confucianism does not lend itself to a vigorous architecture. Ancestor worship, another outstanding religious activity in China, is also less a religion than a social observance which fosters family life and upholds a proper social morality. Finally, Chinese custom has never favoured a priestly caste, so the conditions which did so much to advance the development of religious architecture in India and Western Europe were wanting in China. None of the three national systems of religion required a hall for congregational worship. In consequence, a Chinese House of God has tended to consist of open courts and porticoes, the architectural element being relatively unimportant. Connected with this is a curious monotony, due to the fact that the cardinal canon of Chinese beauty is symmetry and that the majority of buildings are only one storey high. Lastly, the dominant architectural feature is the roof, the importance of which is seldom emphasised in European design. Whereas the European architect hides his roof, the Chinese or Japanese builder displays it. Indeed, Chinese and Japanese

architecture is essentially an art of the roof. It began as a wooden pavilion and has never lost its tent-like character. A Chinese temple consists of a great roof with upturned edges, resting on short wooden columns, the roof being covered with yellow, green or blue tiles of brilliant glaze and colour. Dragons and other grotesques decorate the crest of the roof, or the lines under the eaves. The walls have no structural purpose and are usually little more than wooden screens. Inside, the beams are inlaid with gay colour and the ceilings are decorated with relief-carving and lacquer, the columns being brightened with vermillion and gold and the capitals, maybe, carved with dragons' heads. The house of a well-to-do Chinese gentleman differs little from the house of a Chinese god. A temple is a house with an altar. No fresh invention was required, owing to the necessity for builder or architect to meet the requirements of an elaborate ritual. Only in decorative detail did the Chinese craftsman find full scope for art. The Chinese dragon-design, at least, has meaning. For a Chinaman, the dragon carries within himself that part of the universe which is free and without restraint, as opposed to the shackled microcosm which reveals itself in human life. The Chinese dragon, rather than the Chinese House of God, is the symbol of man's conquest over the enchaining forces of matter.

Under certain circumstances, the Chinese attach magical significance to the chance design of a temple with its surrounding courts and gardens, imagining that the fortunes of a town may be affected by the shape of a neighbouring temple. Sir James Frazer mentions that, in the nineteenth century, the wise men of Shanghai came to the conclusion that the frequent local insurrections were traceable to the fact that one of the temples of the town had been built in the shape of a tortoise, a creature of dire omen. The danger was removed by filling up two of the temple wells, which were supposed to represent the eyes of the tortoise. Blinded, the temple tortoise could work no further harm. Such magical fears, however, are not to be taken too seriously. The tortoise temple does not represent an abiding influence in Chinese religious art any more than does the worship of the kitchen god, "whose temple is a tiny niche in the brick cooking-range."

That the ingenuity of a Chinese architect was confined to elaborating a particular form of roof largely accounts for religious sculpture attaining so much more meaning than the House of God itself. In many cases, one roof is judged insufficient, and two, three or four, and even ten or twelve roofs, are set one above the other. The characteristic pagoda at Nankin, destroyed in 1856, was 200 feet high and had eight roofs. It was built of brick and faced with green porcelain tiles, the lowest storey being a depository for images. The elaboration of the roof deprived Chinese architecture of any opportunity for developing on the lines of a Gothic cathedral. Chinese sculpture was not so circumscribed.

A stele in the Metropolitan Museum, New York, dated the sixth century A.D., records these words : "The Supreme is bodiless, but by means of carved images it is brought before our eyes." Whereas the

Gothic builder sought to raise the faithful from earth to Heaven by cunning craft in nave and sanctuary, the Chinese artist trusted to the carved image. How much sculpture there was in the days when Buddhism was strongest in China we can never know. Like Eastern and Western Christendom, Chinese Buddhism suffered its iconoclastic movement when the Emperor Wu Tsung (A.D. 845) decreed a general persecution of Buddhists, in the course of which 45,000 temples and shrines were destroyed and 275,000 priests and nuns were secularised. Every gold, silver or bronze image of any size was sent to the royal mint, and the smaller Buddhist statuettes were only saved by the kindly intervention of the Buddhist inspector, Su, who returned any image which was not more than a foot high to its owner. Buddhism was restored in 848, but the first enthusiasm for image-making had passed.

The exceptional beauty of Chinese religious statuary, in comparison with similar work in India, may, in part, be due to the greater knowledge of Greek achievement in China as compared with India. The Himalayas shut out Greek ideas from Northern India and confined them to the solitary invasion of Alexander the Great. Afterwards there was only occasional contact through Gandhara. To China, on the contrary, knowledge of Greek statuary continually filtered in by way of the trading routes across Central Asia. By the second century B.C. Chinese armies were in touch with Bactria, then a province of Hellenistic Greece, and influences from Gandhara and Bactria did much to popularise image-making in early Buddhist times. Work of real merit has been found in the Yün-Kang caves in Shansi, dating from the fifth century A.D. Here the main temple consisted of a roomy hall hollowed out of the rock, and having an outer temple of wood built against the face of the cliff. The rock-cut halls were generously carved with scenes from the life of Buddha and Buddhist saints, and were gilded and coloured. It is recorded that 40,000 Turkic families were transported from Central Asia to assist in cutting the Yün-Kang caves, and the statues suggest influences which link them up with the central Asian rock-carvings.

Differing markedly from this rock-cut statuary, but rich in interest in relation to the Chinese House of God, are the votive stelæ and altarpieces. Their charm and interest from the standpoint of religious art may be judged from the well-known Tuan Fang altarpiece, the greater part of which is now in the Museum of Fine Arts, Boston. The inscription gives the date of its casting as A.D. 593, and says that it was made by eight mothers for the Emperor K'ai Huang.

The central figure of Amida represents one of the Bodhisattvas, or saints of mercy and goodness, who have postponed their acceptance of the blessed peace of Nirvana in order to be free to alleviate the suffering of the world. Amida is represented in the attitude of the preaching *mudra*. In attendance are Ananda, carrying a begging bowl and a scroll in a box, and Kasyapa, carrying a *sutra* opened at the words "Lo, this is what I learned of old." A charming floral canopy, in which tiny seated Buddhas form the stamens or pistils of the topmost sprays, a halo of flame and lotus leaves above Amida's head, two symbolic lions

flanking a little statuette of a child god supporting a reliquary, and two flying angels of mercy on the right and left of the canopy, complete an altarpiece, which in charm of design, handicraft and symbolic significance, challenges comparison with any similar work in the world.

Throughout Chinese religious statuary, Indian Buddhism furnished the symbolism, but the craft which gave the rhythmic unity by which a carved image lives as art was due to the Chinese sculptor. In China, Buddhist belief was nearer to earth than it was in India, and, therefore, better fitted for representation in stone. In China, Buddhism moved in the direction of the worship of Poosa, a personified abstraction of the Bodhisattvas, the disciples of Buddha who had passed from earth but continued to exert their influence for the benefit of suffering humanity. The popular doctrine of Mahayana also taught rebirth in a paradise which would be under the rule of Maitreya, a manifestation of Buddha as the god of love. This doctrine of a beautiful paradise in the West, which the faithful could hope to attain, replaced the Indian philosophy of Nirvana. Kwannon, the god or goddess of mercy, was another favourite theme with Buddhist sculptors in China, and the possibilities it afforded to temple decorators can be judged from the superb wooden statue of Kwannon in the Museum of Fine Arts at Boston. The Mother of Mercy is heavy in form and lacks the grace of youth, but the supple masses of the flesh and the easy but sure treatment of the drapery are qualities which only the highest imaginative art attains. When the Boston statue was enriched by crimson, blue and green colour it must have been of rare beauty. There is a similar statue in coloured wood in the Buddhist Room at the British Museum.

Equally noble in pose, and equally significant in its religious meaning, is the heroic statue of a Lohan, or apostle of Buddha, which has the place of honour in the new Buddhist Rooms at the British Museum. It is of white pottery, with a green and yellow glaze on the draperies, and belongs to the T'ang period, dating from about A.D. 800, when the worship of the Lohan was becoming popular in China. Originally, there were sixteen Lohans, but in Japan, the number of these holy men was increased to 500 or 1,000, and they were known as the Rakan. The British Museum Lohan seems to have been one of eight figures which were set in a remote sanctuary in the mountain wilds of Chihli, possibly during a period of Buddhist persecution in the ninth or thirteenth centuries. Similar statues of Lohans are in the Boston Museum, the Metropolitan Museum, New York, and the University Museum, Philadelphia. The grave severity of countenance, the simple yet telling drapery, and the splendid naturalism of hands and features, demand a Greek analogy if the comparison is not to be unjust to the Chinese modeller. Like that of the Hellenes, the religious sculpture of ancient China is humane and reasonable, owing little to symbolism or romance. For these reasons it is easily comprehensible by Western Europeans and, indeed, only needs to be better known to be better loved.

Noteworthy among the centres of religion in China is, or rather was, the Temple of Heaven in the southern city of Peking. The revolutionaries turned it into a workhouse. Originally, the sanctuary consisted

of two altars in an open space a mile square, surrounded by a triple enclosure. Within the enclosure were the living rooms of the priests, storehouses for the temple furniture and pens for the beasts of sacrifice. Apart from Heaven itself, the gods honoured in the sanctuary included the sun, the moon, the planets, the spirits of the rain and the thunder, and the shades of the imperial ancestors. In Imperial times, the Altar of Heaven was regarded as more sacred than any religious structure in China. It was made up of three circular terraces, with marble balustrades and stairways leading to a platform paved with marble slabs, which are arranged in nine concentric circles. Here the Emperor used to bow himself, in acknowledgment that he was the servant of Heaven, but of Heaven alone, at the time of the annual sacrifice, which was held at dawn on the winter solstice. The central altar was furnished with a fire for the roasting of the sacrifice, but near by was a smaller altar, before which prayers for a goodly grain crop were offered. Lastly, there was a triple-roofed Ch'i Nien Tien, or Temple of Prayer for the Year, where the Emperor offered prayers for the spring crops each year. The Ch'i Nien Tien is 99 feet high and is roofed with tiles of deep cobalt blue. When the service was in progress within the temple everything was in the key of blue, the sacrificial vessels being of blue porcelain and the Emperor and his attendants robed in blue brocade. Even the light was azure in tone, as the sunshine filtered into the shrine through blinds fashioned from thin rods of blue glass. As has been said, colour symbolism played an important part in Chinese worship. The temple of the Heavens is blue; the temple of the Sun is red, the famous *sang de bœuf* glaze being specially invented for the decoration of ritual utensils in sun worship. At the temple of the Earth all is yellow, while the temple of the Moon is a pale grey-blue, known as *yueh pai*, or moonlight white.

In Tibet, Buddhism developed a complex priestly hierarchy, and with it certain characteristics akin to Roman Catholicism, including an extensive monastic system. The Tibetan monks spend their days praying, reading the sacred books, and turning the prayer wheels containing sacred formulae, but they have not gained the close contact with Tibetan social life, which so powerfully influenced the architecture of the monks and friars in mediæval Christendom. In practice, religion in Tibet is a polytheism in which many minor godlets are worshipped along with the more philosophical abstractions of Buddhism. Nevertheless, many remarkable temples and shrines have been built in connection with Lamaism. A famous temple at Peking is furnished with a *stupa* of sculptured marble, which was built by the Emperor Ch'ien Lung in memory of a Grand Lama, who chanced to die in the capital from smallpox during a visit in 1780. The spire of the *stupa* consists of thirteen step-like segments, symbolising the thirteen heavens of the Bodhisattvas, and is surmounted by a cupola of gilded bronze. On the eight sides are carved scenes from the life of the Lama, including the remarkable birth-scene, pictured in Mr. Bushell's *Chinese Art*.

BUDDHIST ART IN JAPAN

At first sight religious architecture of a high order might be looked for in Japan. Here is a people endowed with a sense of natural and artistic beauty in a high degree; indeed, in no nation since the city-states of Greece or Northern Italy has art been more prevalent. Joy in beauty, refinement of taste and skill of craft, are national characteristics rather than the endowment of specially favoured people, as in most lands. Japanese temples, moreover, have the advantage of settings of exceptional loveliness, to which the cherry in spring and the reddening maple in autumn give added charms. Of the temples at Nikko the Japanese themselves say: "Do not use the word magnificent until you have seen Nikko." The temples owe not a little of their charm to the avenues of fir and the superb mountain scenery in which they are set. In a Japanese temple area, carved gateways, paved courts with their votive lanterns, stages for the mystic dance, shrines with their golden walls and coloured pillars, stairways, and cloisters with their gilded demons and dragons, make up a fantasy which is bewildering in its variety and ingenuity, and yet fails to answer to the description architectural beauty. Like China, Japan has developed an architecture of the roof, and its graces are those of carpenter work. Japan is an earthquake country. On an average four earthquakes are registered in Tokio every day and the danger of destruction by earthquake is ever present. Experience has shown that wooden buildings last when stone erections fall. Perhaps this sufficiently accounts for the absence of a vigorous school of architectural design in the Greece of the East, since the Hellenes themselves were not great architects while they built in wood.

After Nikko, the temples of Kyoto, including the Hall of a Thousand Statues, dedicated to the Mother of Mercy, Kwannon, are justly famous. In Tokio, too, there is a famous group of temples gathered about the tombs of the Six Shoguns. Each sanctuary has a court with stone railings, where votive lanterns are hung, the whole being in a dark grove of fir trees. Entering a Buddhist temple in Japan, a worshipper washes his hands, chooses the incarnation fitting for his special needs, and pulls a bellrope to awaken the deity. Then, throwing a coin into a grated receptacle, he whispers a prayer and makes way for another *dévol*. The Japanese worship of the Buddha cannot be said to be heart-felt. Indeed, if any religion has a firm hold upon the imagination of the educated Japanese, it is Shintoism, the combination of ancestor and nature worship, in which God is worshipped in a temple imitating an ancient Japanese hut, with its thatched roof and unpainted walls.

Under such circumstances it would have been strange if architecture had acquired in Japan the strong religious bent which the alliance between Church and State secured for it in mediæval Europe. Nor, in religious sculpture, did the Japanese achieve the serene spirituality of Buddhist art in China. Famous among Japanese Buddhas is the Daibutsu of Kamakura, the colossal bronze image of Amida which was cast by Ono Goroemon in the thirteenth century. At one time the statue

was sheltered by a great shrine, but this was destroyed by fire. The Daibutsu is over 40 feet high and was made from bronze plates, separately cast and then riveted together. The interior of the statue serves as a little chapel. The sentiment of deep meditation in the bowed head and the purity of the lines make the Daibutsu memorable in religious statuary, but few will credit it with the mystic repose and sense of spiritual attainment which characterise Buddhist sculpture in China at its best.

At the end of this summary of 2,000 years of religious art in the Far East, it may be repeated that its worth will only be revealed to those who look beyond the temple and its decorative statuary to the ideas regarding the Eternal enshrined in them. In so far as it is art, every House of God is an effort to express man's sense of deity. Forget this search for deity and the thing made becomes a riddle without an answer. Nevertheless there are thoughts and feelings which fail to find due expression in certain arts. It does not follow that every idea which the artist seeks to express does, in fact, find expression. It may be that the effort was a vain one ; that the idea could not be expressed. Certain critics of Buddhist art may be justified because the artists of India, China and Japan attempted the impossible. If this be so, the Western critic is only entitled to judge when he has made due search for the idea that sought expression. Until recent years few among Western art lovers were willing to make the effort needed for a judgment of any worth. Since the turn of the century, books, museum objects, and such an experience as the Chinese Exhibition at Burlington House, London, in the autumn of 1935, have accumulated, and they make the effort relatively easy and the reward of labour sure.

CHAPTER VIII

THE ISLANDS OF THE NORTH.

ANGLO-SAXON AND CELTIC CHURCHES

In Christian architecture, the church of the Holy Wisdom at Constantinople was the outstanding achievement of the Greco-Roman period. Nevertheless, in the East, Justinian's miracle was not repeated, and, in the West, the song of joyous light which echoed through the arches, domes and half-domes of Sancta Sophia, seems not to have answered to the mood which the Faithful sought in a House of God. It may be that the basic plan of Justinian's church was too secular for Christian usage. The architectural prototypes of Sancta Sophia were the public baths, while, in respect of ritual, Western Christendom was developing the basilican form to its needs. Five centuries more passed before a style was evolved which answered more surely to the needs of Christian worship, and then the new thing was found by builders who had no first-hand knowledge of either Rome or Byzantium. To understand these centuries, a vivid sense of the Germanic incursions and the changes they wrought in the Western Roman Empire is necessary.

Incursions of Northmen were no new thing in Roman history. A hundred years before Christ, the Cimbri, driven from their home in Denmark by floods, settled for a while in the Danube Valley, whence they ravaged Gaul and Northern Italy. The Cimbri were crushed by a Roman army under Marius in 101 B.C. For a time the campaigns of the Caesars stopped the German movements south of the Elbe and the Danube. Nevertheless, the victory of Arminius over Varus in A.D. 9, the defeat which forced from Augustus the cry "Varus,-Varus, give me back my legions," was prophetic. Hungary was won by the Goths in A.D. 270, and Athens, Corinth and other Roman seaports were ravaged by Gothic pirates. In A.D. 378 Valens was defeated before Adrianople, and, in 410, Rome was besieged and sacked: the Emperor Honorius fled to Ravenna. Twenty years later, the Vandals overran Gaul and Spain, and formed a kingdom in Northern Africa. When Carthage fell in A.D. 439 Western Christendom had passed to the invading Germans.

A student of the arts will not need a detailed picture of these incursions. It will be enough to visualise Christendom in the making, as Hardy visions Napoleonic Europe in *The Dynasts*. The nether sky opens and Europe is disclosed as a prone, emaciated figure, the Alps shaping like a backbone and the branching mountain chains like ribs. Drawing nearer, the peoples are seen writhing, heaving, vibrating—Angles, Saxons and Jutes on the coast-lands of England, Visigoths in

Gaul and Spain ; Vandals in Northern Africa, until both Visigoths and Vandals are dispossessed in time by the conquering Arabs. To the east, the Eastern Roman Empire is threatened by the Ostrogoths, who have crossed the Balkans, as their cousins, the Western Goths, have broken into France and Spain. In France, the Franks and Burgundians hold the power, while Austria, Hungary and Eastern Europe are threatened by the Huns, fierce horsemen of the steppes. Forty-six churches of the Constantine age were destroyed in Rome alone when Genseric the Vandal took the city in A.D. 455. Gregory the Great, in his Homily upon Ezekiel, wrote :

“ Everywhere we see mourning ; we hear laments : cities, fortresses and villages are devastated ; the earth is a desert ; there is no end to the scourging of God’s judgment. Behold Rome, once the Queen of the World, to what is she reduced ? Rome is empty and has barely escaped the flames ; her buildings are thrown down ; the fate of Nineveh is upon her.”

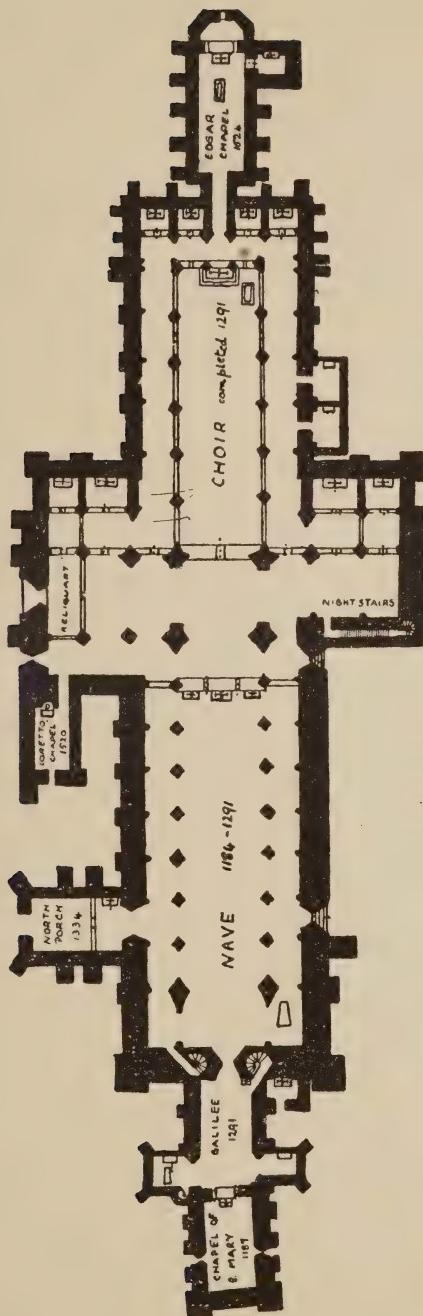
In the chaos which followed the Germanic invasions the one stable element in Western Christendom was the community headed by the Pope at Rome. When Alaric reached the walls of Rome in 408, Pope Innocent I. was the chief negotiator with the enemy. In 451, Pope Leo I. saved Rome from Attila, the Hun. The power of the Popes increased still more when Gregory the Great converted the barbarian conquerors from Arianism to the orthodox Catholic faith. Headed by the greater Popes, the Catholic faith set itself to realise Augustine of Hippo’s “ City of God,” the world-wide theocratic state which would replace the Empire of Rome. Greek philosophy was embodied in the scheme of Christian dogma, and the constitution of the Church was strengthened by elements of Roman political and social organisation. As Roman Christianity was accepted throughout Western and Northern Europe between A.D. 400 and A.D. 1000, the Roman tradition of law and administrative order was extended to lands which had not known it even in the times of Trajan and Hadrian. Slowly, the bishops made themselves masters of every form of political, social, mental and spiritual life in Western Europe, and sought to endue them with a distinctively Christian spirit.

At first, the leaders of the Church had no desire to usurp the functions of secular government. If the Church claimed temporal as well as the spiritual power, it was not that the Pope might actually handle the temporal sword, but that it might be wielded under conditions controlled by the Church. Rather there was a separate organisation of professional priests, claiming a special authority from God to declare His will. When European society began to reconstruct itself after the invasions of the Northmen, the greater bishops and abbots had administrative authority similar to that of the feudal princes.

There is no better guide through the seething chaos of possibilities, which culminated in the new unity, Western Christendom, than some knowledge of the Early British Church. Legend tells that Joseph of Arimathea brought the gospel to Britain. In a vision, he was told to seek

a hill resembling Mount Tabor, the oak-clad summit near Nazareth, which the early Christians regarded as the Mount of the Transfiguration. Accompanied by twelve holy men, Joseph came to Avalon, a little island in the Brue Valley in Somersetshire. When he saw the Tor of St. Michael, near Glastonbury, Joseph knew it to be the hill of his dream. Below the Tor he cut caves for his twelve companions and buried the Cup of the Last Supper. Here blossomed the Holy Thorn, which sprang from Joseph's staff when he came to Weary-all Hill. Ever after the Thorn flowered on Christmas Day. Here, too, Joseph built a church of "twisted wands," which we may regard as the earliest Christian sanctuary in our islands. It was a link between the British and the Saxon House of God. North Somerset did not pass into the possession of the Saxons until A.D. 658, when the Saxons had accepted Christianity for some years. Glastonbury, therefore, is the one religious foundation in England which survived the Germanic invasions, and there the Saxon priest knelt before the very altar which the Briton had used. Later, the church of wattle was enclosed in wood and a leaded roof was added, this being the *Ligneum Basilica* mentioned in an alleged deed of King Ina (A.D. 725). Finally, Glastonbury became the premier mitred abbey. Since the Dissolution of the Monasteries, Glastonbury Abbey has had a chequered existence, but the ruins, with the so-called Chapel of St. Joseph and the great piers of the choir, remain as a beautiful memorial of the chapter which the foundation added to our island story.

Read aright, the plan of the minster church of Glastonbury sums up the history of a score of great English foundations. First, the missionary monks and their church of daub and wattle; then a Saxon church of wood or stone, and, at the last, the vast Norman or Gothic nave, transepts and sanctuary, with shrines, altars and chapels, which summed up a faith that had been more than 1,000 years in the making. In the plan of Glastonbury the original church of St. Joseph is represented by the lovely little ruin generally called after the reputed founder of the monastery, but really the Chapel of St. Mary. The first church of St. Joseph had so many sacred associations that Paulinus of York, in Saxon times, protected it with a roofing of lead and a casing of wood. There were numerous rebuildings and additions to the *Ligneum Basilica*, but the wooden church was not destroyed until the fire of May 25, 1184. It was then replaced by the chapel of St. Mary, built in the transitional Norman style and dedicated in 1187. The abbey church, 60 feet eastward of the chapel, was commenced at the same time and the building occupied 70 years. The vaulting and decoration of the nave were added by Abbot Adam de Sodbury in the fourteenth century. Somewhat earlier the nave was connected with the Chapel of St. Mary by building a great Galilee porch which filled the 60 feet between the west end of the nave and the eastern wall of the chapel, which was broken down and an arch substituted so that Chapel, Galilee, nave and sanctuary made one great church, 460 feet long. In the fourteenth century the choir was enlarged eastward by the addition of a processional path at the back of the High Altar and a series of eastward



GLASTONBURY ABBEY

chapels, and, when the Edgar Chapel was added at the east-end by Abbot Bere, on the eve of the Reformation, the church was 580 feet, that is the longest church in England except Old Saint Paul's. The porch on the north side of the nave was almost twice as large as the corresponding door in Wells Cathedral, and contained the relic cupboard of the monastery before the Great Reliquary was built in the north transept. Inside, the nave was separated from the choir by a rood screen, and in a bay further east stood the pulpitum. The nave, which was built at the end of the twelfth century and in the early years of the thirteenth century, was austere Early English work, but the choir enlargement, due to Abbot Walter de Monyngton, was in the Perpendicular style derived from Gloucester Abbey. In front of the High Altar, slightly to the south, was the tomb of King Arthur and Queen Guinevere, which was enshrined during a visit of Edward I. to the Abbey in 1278. The Edgar Chapel behind the altar was specially built to contain the body of King Edgar, and was finished by the last abbot of Glastonbury, Richard Whyting, who also built a sacristy in the south wall and the polygonal apse at the east end. The Loretto Chapel to the west of the north transept was of Italian Gothic workmanship, due to a visit of Abbot Bere to Italy. The sites of the two chapels were revealed by the excavations of Mr. Bligh Bond, whose disinterested researches have done so much for England's premier abbey.

Joseph's coming to Glastonbury Tor is first recorded by William of Malmesbury in the twelfth century, so the story must be left in the realm of Christian legend. Sober history suggests that the earliest Christians in Britain were Roman soldiers and "Romanised natives," at the best an insignificant minority living among the pagans. As in Italy, other Eastern cults were in competition with Christianity. An altar inscribed "Sancto Mithræ" has been found at Caerleon, near Glastonbury, and at Borcovicus, on Hadrian's Wall, there are remains of a grotto dedicated to Mithras with six altars, dating from A.D. 252. Another altar found along the Wall represents Mithras coming from the egg and surrounded by the signs of the Zodiac. As Gaulish, German, Spanish, and other provincials enrolled in the Roman army of occupation were attracted to the "Invincible Sun God," as the deity of the lowly and afflicted, so they were attracted to the Christ of Galilee. Early in the fourth century Christianity had established itself sufficiently to justify persecution, and St. Alban was martyred. During the persecutions of Diocletian, Alban gave shelter to a fugitive Christian cleric. Alban was a Roman officer, and was so impressed by the Christian's habit of prayer that he accepted baptism, and when the soldiery came to arrest the cleric, Alban put on the hooded cloak of the Christian and gave himself up in place of the fugitive. A shrine in honour of Alban's martyrdom was raised at Verulamium and, later, a famous Benedictine community associated itself with the cult of Britain's proto-martyr, hence St. Alban's Abbey and Cathedral. By 314, the Christian community in Britain was sufficiently organised to send three bishops to the Council convened at Arles by Constantine, and 100 years later, A.D. 429, the British Christians received the memorable mission led by

Germanus of Auxerre. With Bishop Lupus of Troyes, Germanus came to Verulam and faced the Pelagian heretics in open debate. Already there was "a church of admirable workmanship" above the shrine of the martyred Alban, and we are told that Germanus and Lupus sought the blessed Martyr Albanus "in order to render thanks for his mediation to God, and here Germanus, having with him relics of all the apostles and of different martyrs, offered prayer and commanded the grave to be opened in order to deposit the precious gifts therein." Doubtless the first church of St. Alban was built in the Roman manner. The foundations of a Roman basilica, probably a church, have been excavated at Silchester. They show a three-aisled building with a narthex, and an apse to the west. There was a square mosaic in the apse in which stood the altar.

Twenty years before the mission of Germanus and Lupus the Roman legions had been recalled to Rome. During the following 500 years England and Southern Scotland were captured by bands of sea pirates from Northern Germany, Denmark and Scandinavia. The earliest of the conquerors were Angles and Saxons, most of whom entered by the larger rivers and so worked their way inland, a practice later adopted by the Danes. The war bands settled in rural districts in small, self-sufficing groups, which offered few opportunities for trade. They brought no tradition of religious architecture with them, and it is strange that the history of so many churches can be traced to Anglo-Saxon times. The monks of the Benedictine order were the real makers of Western Christendom in these troubled centuries, and the ideals of St. Benedict, the father of monasticism, influenced church building until Norman times. Benedict was born about A.D. 480, and lived as a solitary in the wilderness of Subiaco near Rome. Disciples were attracted, and huts and cells of hermits arose in the desert. At length Benedict directed that twelve monasteries should be built, in each of which he placed a prior and twelve disciples. The house on Monte Cassino, built around an ancient shrine of Apollo, was the forerunner of all Benedictine monasteries. Here St. Benedict formulated his "Rule," based upon the experience of St. Basil and St. Martin. St. Maurus introduced the Rule of St. Benedict into France, and Augustine brought it to England. It was adopted at Canterbury, St. Albans, Glastonbury, and Jarrow, among other famous houses, and in London at Bermondsey, and at the West Minster on Thorn Island. After Augustine, Benedictine houses arose in such places as Lincolnshire and Somersetshire. The monks drained the marshes and cleared the forests. In the Middle Ages, the foundation of a monastery was the equivalent of the foundation of a modern British colony. Monks went into the waste places of the earth and won them for civilisation with as much fervour as they won souls for God. At first it was the tribe which was converted rather than the nation. Consequently English cathedrals tended to arise in places away from the centres of population, whereas in France, where the organising unit was the bishop, rather than the abbot, they were set in large towns. Later, Benedictine houses served as fortresses for the Norman Kings. Along the marshes of Wales a chain of monastic houses,

Gloucester, Worcester, Tewkesbury and others, made a barrier against the Welsh, just as the disaffected fen-land of East Anglia was dominated by Ely, Croyland, Peterborough and Norwich.

A marsh ribbed with occasional dykes : how often was this the economic background against which a mediæval monastery arose. The dykes, cut by the monks and their men, gave the first stretch of land for the little settlement ; elsewhere the waters lay stagnant over the undrained moor, with long, grey veils of mist above them most of the year. Even where the dykes had been cut, the waters were ever ready to claim the low-lying meadows once more.

Cicero once described the Roman *colonia* as an image and model of the Roman state ; so the monastic settlement was an image of Mother Church. Every monastic house was a mission station, but it would have lacked most of its usefulness but for the unifying influences emanating from the Popes at Rome. If the Benedictines were the soldiery of Christendom, the Pope was the Emperor ; St. Benedict's plan was that each monastery should form a permanent community distinct from every other monastery, the Papacy being the organising factor. The effect of the Benedictine missionary policy can be followed in the story of the evangelisation of Kent by St. Augustine, at the end of the sixth century. The Venerable Bede tells :

" In the year of our Lord 582, Maurice, the fifty-fourth from Augustus, ascended the throne and reigned 21 years. In the tenth year of his reign, Gregory, a man renowned for learning and behaviour, was promoted to the apostolical see of Rome and presided over it 13 years, 6 months and 10 days. He being moved by Divine inspiration, in the 14th year of the same emperor and about the 150th after the coming of the English into Britain, sent the servant of God, Augustine, and with him several other monks who feared the Lord, to preach the word of God to the English nation."

Augustine's first church was Queen Bertha's oratory of St. Martin, at Canterbury. Here the missionaries met to sing, pray, celebrate the mass, preach and baptise, until Ethelbert allowed them to preach openly and build or repair churches in all parts of his tiny kingdom. The little church was built, as Bede tells, before the Roman legions left in 408. The masonry of the chancel is composed of Roman bricks for about 18 feet, and traces of a square-headed Roman doorway can be seen in the south-western corner of the chancel. The font, of Caen stone, in which Ethelbert is said to have been baptised on the Feast of Whitsunday, June 2, 597, is still used at St. Martin's. It consists of a base, three tiers and a rim, the lowest rim being decorated with scroll-work and the second with groups of entwined arches. It is likely that the font was shattered when the Danes sacked Canterbury and murdered Archbishop Alphege, and that the fragments were reunited, a third tier being added with Norman ornamentation. After Ethelbert's baptism, Augustine received the grant of a Roman idol-house close to St. Martin's, where Ethelbert himself had been wont to sacrifice. Augustine consecrated it to St. Pancras, in accordance with Gregory's

instructions : " If the temples of the idols are well built, it is requisite that they be converted from the worship of devils to the service of the true God." St. Pancras had a nave 47 feet long by 26 wide, with an apsidal chancel of about the same size, separated from the nave by four Roman columns.

Augustine also made a Roman church at Canterbury the foundation of his cathedral, Christ Church, using the Vatican basilica of St. Peter as a model. The earliest Canterbury Cathedral had a nave and aisles, and eastward of the " Choir of Singers " a raised altar, under which was a crypt for the relics of saints. There were apses at the east and the west ends, the latter containing an altar to the Virgin and the archiepiscopal throne. The stone chair of St. Augustine may still be seen in Canterbury Cathedral. A baptistery was added to the east end about A.D. 750, and the shrine of St. Wilfrid was set in the eastern apse. When St. Dunstan died he was buried between the altar steps and the choir. Augustine's cathedral was in being until the fire of 1067, when the church was rebuilt in the Norman style by Lanfranc.

Augustine also founded the abbey of St. Peter and St. Paul (now known as St. Augustine's), the Abbey Church being designed as a burial place for the Kentish kings and archbishops of Canterbury. Augustine, Ethelbert, Bertha, and her French chaplain, Luidhard, were all buried in St. Augustine's. Bede tells that the inscription upon the missioner's tomb read :

" Here rests the Lord Augustine, first archbishop of Canterbury, who, being formerly sent hither by the blessed Gregory, bishop of the city of Rome, and by God's assistance supported with miracles, reduced King Ethelbert and his nation from the worship of idols to the faith of Christ, and having ended the days of his office in peace, died the 26th day of May, in the reign of the same king, A.D. 604."

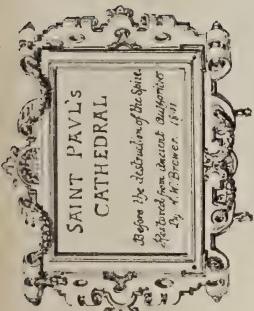
The first monastic settlement at St. Augustine's was a group of wooden buildings, surrounded by a hedge of thorns, and including a common dormitory and refectory. In the course of centuries, the monastery was rebuilt again and again, the most striking feature to-day being the gateway of Abbot Fyndon, built between 1283 and 1309. It is flanked by two octagonal towers, a pointed arch joining tower to tower. Above the gate, with its vaulted archway, is a gate-chamber, formerly the State bedroom of the monastery. The traceried windows are very beautiful. Hard by, outside the walls, was a granary and the almonry, served by a society of brethren and sisters. Here a school was held and doles given to the poor and aged. Near the gateway, too, was the Guesten Chapel and the Guesten Hall, with its kitchen beneath, still used for its original purpose and, therefore, one of the oldest dining halls in the country. Crossing the great garth, with its well, the monks came to the Abbot's House, where Abbot Clarembald, the creature of Henry II., took counsel with the murderers of Becket. Beyond, was a door leading to the cloisters and the cloister gardens, and at the back of the cloisters, the refectory and the great kitchen, a vaulted hexagonal building, beneath which ran the watercourse. The lavatory near by

was used for "the weekly feet washing" and the "fortnightly shaving" of the monks. The minster-church was rebuilt between 1070 and 1091, when the body of St. Augustine was translated to a shrine near the high altar. The new minster-church consisted of a nave and aisles of ten or eleven bays, with two western towers. The choir occupied the crossing and the easternmost bays of the nave. The eastern arm of the church consisted of three bays with an apse and an encircling aisle, out of which opened three circular chapels. A central tower, north and south transepts, each with an eastern apse, completed the upper structure. The crypt below with its altars can still be seen.

For several centuries St. Augustine's outshone the Cathedral itself in the beauty of its buildings and the fame of its wonder-working relics. Custom ordained that no King of Kent or Archbishop of Canterbury should be buried within the precincts of the Cathedral. Their final resting place was always the Abbey church just beyond the walls, and the Anglo-Saxon kings were buried at St. Augustine's until the end of the eighth century. In 758 Archbishop Cuthbert determined to break the precedent. Secretly, he secured the sanction of the King of Kent and the Pope to the change, and on his death bed, he gathered the monks of Christ Church around him and delivered the warrant to them. It ordered that the cathedral bell should not be tolled until three days after his death and burial. The mandate was obeyed, and Cuthbert was buried before the monks of St. Augustine's Abbey learnt what had happened. So the cathedral became the burial place of St. Dunstan, of the martyred Alphege, of Lanfranc, the first Norman archbishop, of St. Anselm, the great theologian, and, finally, of Thomas of Canterbury.

From Canterbury, Augustine colonised Rochester, the Roman station commanding the passage of the Medway, and a second cathedral was consecrated. From Rochester, Christian influences spread to London, where little remained except the ruined walls to mark the Roman settlement after the town was taken by the East Saxons about A.D. 570. Mellitus, the first Saxon bishop, was enthroned in 604, and, under the instruction of Gregory, founded a church dedicated to St. Paul. In a letter to Mellitus, written in 601, the Pope was insistent that pagan temples should not be destroyed but turned to Christian uses whenever possible, adding that "for hard and rough minds, it is impossible to cut away abruptly all their old customs, therefore he who wishes to reach the highest place must ascend by steps and not by jumps." The letter reads :

" To his most beloved son, the Abbot Mellitus : Gregory, the servant of the servants of God. We have been much concerned, since the departure of our congregation that is with you, because we have received no account of the success of your journey. When, therefore, Almighty God shall bring you to the most reverend Bishop Augustine, our brother, tell him what I determined upon, *viz.*, that the temples of the idols in that nation ought not to be destroyed : but let the idols that are in them be destroyed : let holy water be made and sprinkled in the said temples, let altars be erected, and

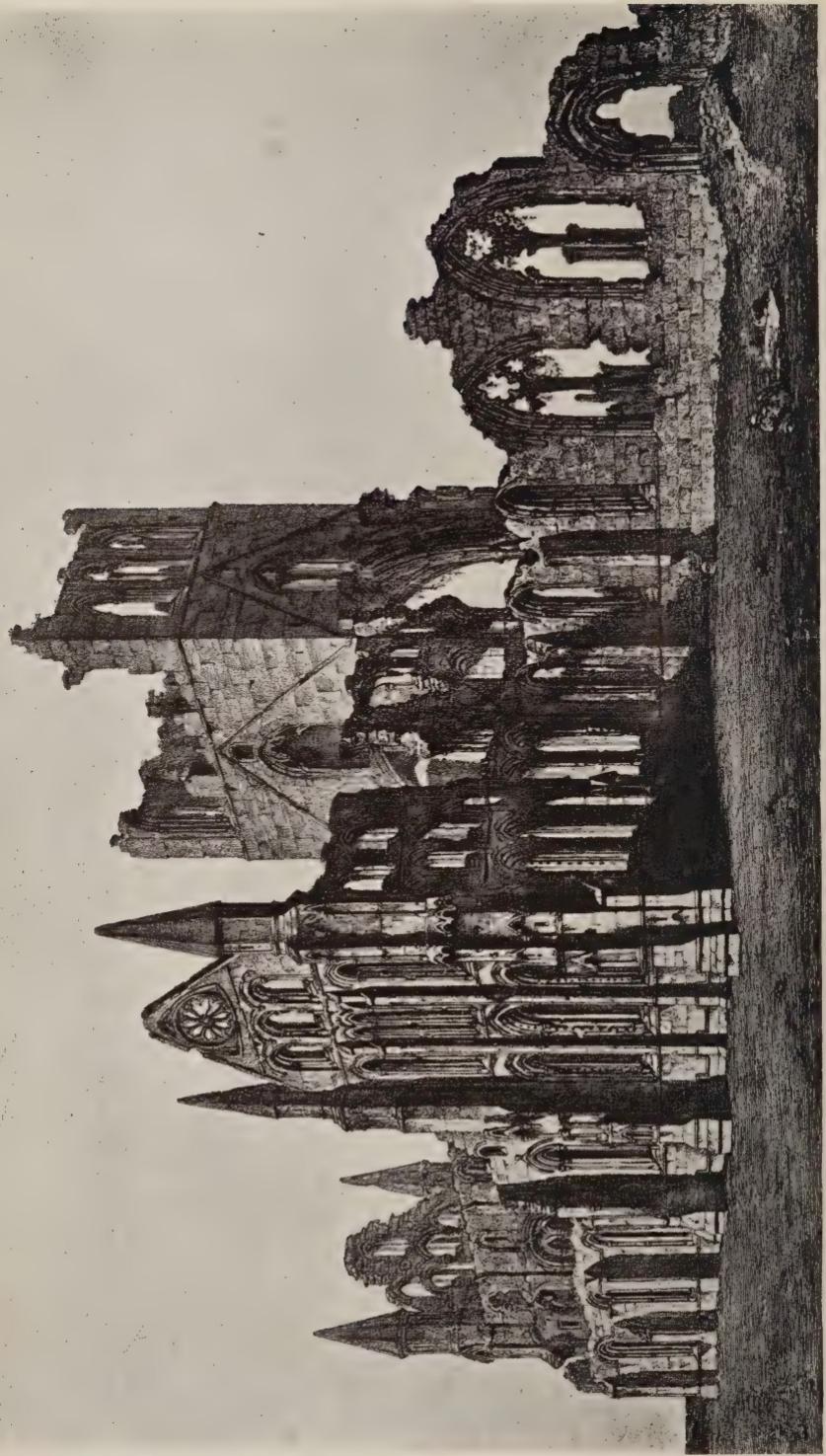


A. Dr. the Cleric.
B. Dr. Battie.
C. The King's Chaplain.
D. Dr. Gandy.
E. Dr. Gandy.
F. Dr. Gandy.
G. Sir Christopher Wren.
H. Dr. George Hough.
I. Dr. Parker.
K. Dr. Charnell.

OLD ST. PAUL'S
from a drawing by H. W. Brewer

(see page 116)

WHITBY ABBEY
from an engraving by J. Coney



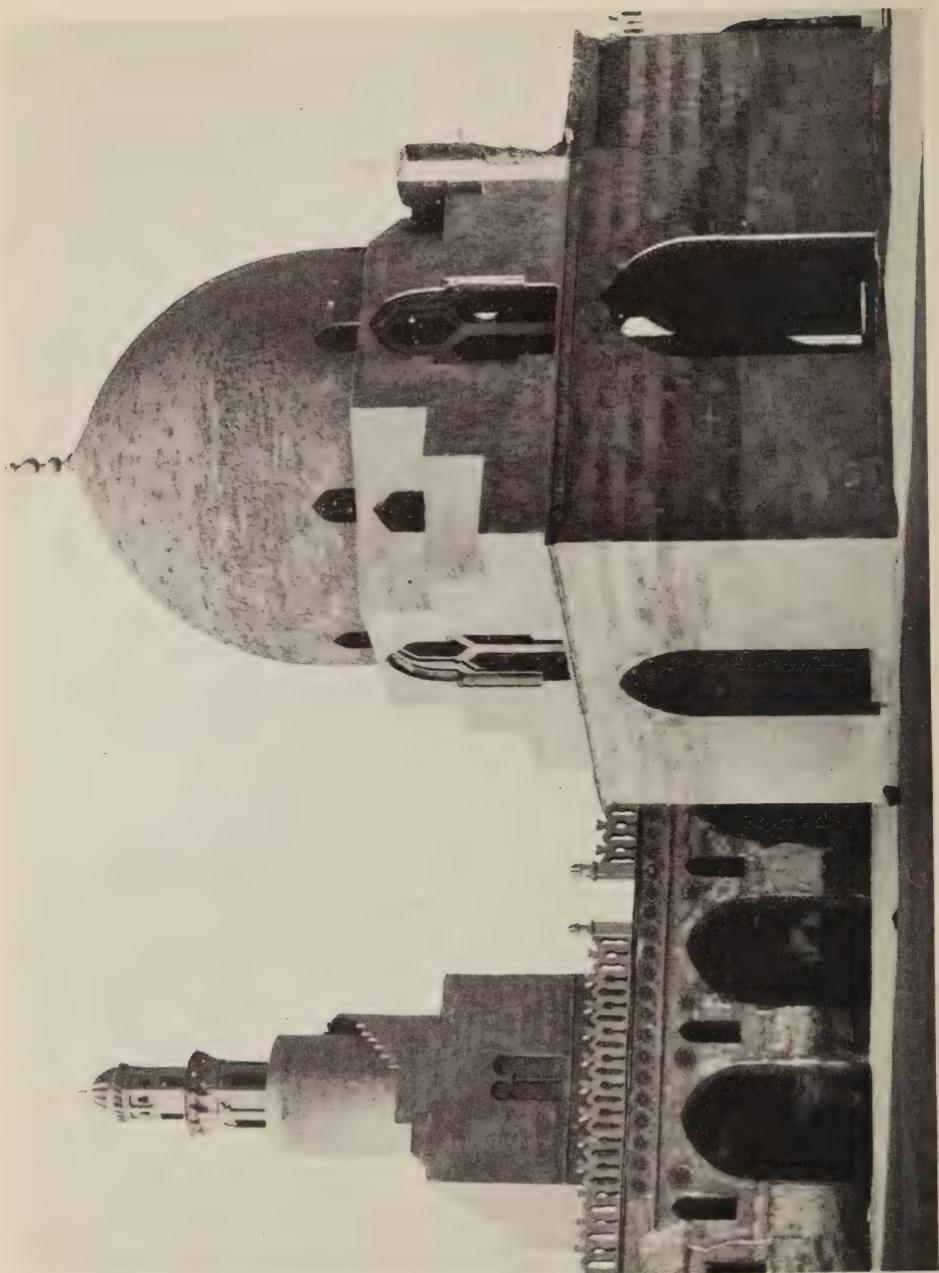


EARL'S BARTON : THE SAXON TOWER

Frith & Co.

(see page 127)

THE MOSQUE OF IBN TULUN, CAIRO



relics placed. For if those temples are well built, it is requisite that they be converted from the worship of devils to the service of the true God ; that the nation, seeing that their temples are not destroyed, may remove error from their hearts, and knowing and adoring the true God, may the more familiarly resort to the places to which they have been accustomed. And because they have been used to slaughter many oxen in the sacrifices to devils, some solemnity must be exchanged for them on this account, so that on the day of the dedication, or the nativities of the holy martyrs, whose relics are there deposited, they may build themselves huts of the boughs of trees about those churches which have been turned to that use from temples, and celebrate the solemnity with religious feasting and no more offer beasts to the devil, but kill cattle to the praise of God in their eating, and return thanks to the Giver of all things for their sustenance : to the end that, whilst some gratifications are outwardly permitted them, they may the more easily consent to the inward consolations of the grace of God. For there is no doubt that it is impossible to efface everything at once from their obdurate minds ; because he who endeavours to ascend to the highest place, rises by degrees or steps, and not by leaps. Thus the Lord made himself known to the people of Israel in Egypt : and yet He allowed them the use of the sacrifices which they were wont to offer to the Devil, in his own worship ; so as to command them to his sacrifice to kill beasts, to the end that, changing their hearts, they might lay aside the part of the sacrifice, whilst they retained another ; that whilst they offered the same beasts which they were wont to offer, they should offer them to God, and not to idols ; and thus they would no longer be the same sacrifices. This it behoves your affection to communicate to our aforesaid brother, that he, being there present, may consider how he is to order all things. God preserve you in safety, most beloved son.

" Given the 17th of June, in the nineteenth year of the reign of Our Lord, the most pious emperor, Mauritius Tiberius, the eighteenth year after the consulship of our said lord. The fourth induction."

There were drawbacks to this use of an idol house as a Christian church. Not every Saxon prince supported the Roman missionaries with the singleness of purpose of Ethelbert. Thus, Redwald of East Anglia set up two altars in a heathen temple, one in honour of " Christ's sacrifice," but the other for the worship of idols. When Paulinus accompanied Ethelburga to Northumbria, he also found idol-houses a danger and demanded their destruction. During the memorable meeting of King Edwin's Witan at Goodmanham, near York, in 626 or 627, which debated the possibility of Northumbria accepting Christianity, a thane rose in his place : " I will tell you, O king, what man's life seems to me. At times, when your hall is lit for supper on a wild winter's night, a sparrow flies in by the door, shelters for a moment in the warmth of the fire, and then flies once more into the darkness of the storm. None

sees the bird before it comes or after it goes ; only while it flutters by the glowing logs. Such, I ween, is man's life on earth. Of what has gone before and what will come, we know nothing. If the stranger can teach us that, let him be heard."

The thane's parable gave Paulinus his opportunity, and Edwin and his court were converted. The first act of Paulinus was to order the destruction of the venerated temple of Goodmanham. Instead, he built the little wooden chapel, in which Edwin was trained as a catechumen, and in which he was baptised on Easter Eve, 627, together with his grand-niece, later St. Hilda of Whitby. Such a wooden church may still be seen at Greensted in Essex. The low walls are built of oak trunks, split asunder and placed vertically side by side, the rounded halves facing the exterior, fillets of wood being added to cover the cracks. As for the church furniture, this had been supplied by Pope Gregory, who also sent skilled Roman builders to superintend the work of the British woodmen and masons. When Paulinus joined Augustine in 601, he brought a store of sacred vessels, ornaments and vestments from Rome. Later Paulinus built stone churches, the archiepiscopal cathedral at York being a basilica with an *atrium* at the west end, built around the wooden oratory in which Edwin was baptised. Beneath the raised floor of the apse was a *confessio* or crypt, where the holy relics were placed.

From York, Paulinus went to the Roman hill-town of Lincoln, where he converted the prefect, Blaecca, and persuaded Blaecca to build the stone church on the site now occupied by St. Paul's, Bailgate (meaning St. Paulinus). In this church Paulinus consecrated Honorius Archbishop of Canterbury, on the death of Justus.

One more episode, from the early history of St. Paul's on Ludgate Hill, will suffice to show the dangers which Christianity was ever facing in these early times. Mellitus owed his early success in London to the influence of the East Saxon king, Sebert, whose tomb is still to be seen in Westminster Abbey. When Sebert died, his three sons relapsed into idolatry. Coming one day to St. Paul's they found Mellitus celebrating Mass.

"Why do you not give us also a share of the white bread which you used to give to our father, Saba ?"

"If you are willing," retorted the bishop, "to be washed in the font of salvation in which your father was washed, you shall partake of the holy bread which he ate ; but if you despise the laver of life, you cannot have the bread of life."

Cried the young kings : "We will not go into that font, for we know not what need we have, but nevertheless, we choose to eat of the bread."

The dispute resulted in the expulsion of Mellitus from the East Saxon kingdom, and accounts for the fact that the fourth bishop, Erkenwald, and not the founder, Mellitus, became the patron saint of London's cathedral. Erkenwald was a son of an East Saxon king, Offa, and held the bishopric from 675 to 693. In life, he had founded a monastery at Chertsey, and when he died the monks contended with

the clergy of St. Paul's for the right of burial. The energetic Chapter of St. Paul's went to Barking and seized the bier, regardless of the cries of the monks, "He is our Abbot." On the way to London, however, certain happenings persuaded the good monks of Chertsey that the will of Heaven was that Erkenwald should rest in St. Paul's, the swollen waters of the Lea dividing so that the funeral procession crossed the river dry-shod. Erkenwald's body was buried in the nave of St. Paul's, but was later moved to the Lady Chapel, where the shrine was regarded as the palladium of the city until the Reformation. Saxon St. Paul's, which was burnt in A.D. 962, had a narthex and atrium at the west end and a presbytery and apse to the east. The walls were of rubble, with ashlar masonry at the angles, and the windows were round, with triangular heads. In the nave the piers were short and crowned with square blocks of stone, the mouldings being axe hewn.

THE CELTIC MISSIONARIES

The churches founded by the Roman missionaries under Augustine were only a part of the Christian movement in the British Isles. Of equal importance were the Celtic churches of Western England, Ireland and Southern Scotland. The first Celts, a tall, fair, round-headed people of good physique, seem to have reached Britain from Gaul about 1300 B.C. bringing a well-skilled craft in metal working. The worship of such a God as Bel, however, required no temple, the stones of worship and other idols being set up in the open air. A large stone, like the Cromm Cruach, in County Cavan, had twelve smaller idols around it, covered with bronze plates, ornamented with the familiar whorls and spirals. Later, this non-representational ornament was utilised in Christian decoration where the Celtic missionary monks established themselves, and it distinguished much Christian art in the North from the representational decoration derived from the Greco-Roman example.

During the Roman period there were some Christian conversions in Ireland, but it was not until the fifth century that the Irish Celts and their relatives in Southern Scotland accepted Christianity generally, their teachers being Gaulish missionaries, of whom the best known are St. Patrick and St. Ninian. It is recorded that Ninian built a stone church, dedicated to Martin of Tours, at Whithern, in Wigtonshire. The church was known as *Candida Casa*, and here Ninian was buried in A.D. 432. It seems probable that St. Patrick was trained at the monastery of Lerins, near Cannes, and reached Ireland by way of Glastonbury.

In the fifth century, when St. Patrick entered upon his missionary effort, Ireland was the one western land which had escaped the ravages of the Northmen. The Irish monastic system, however, differed from that of St. Benedict. Whereas Benedict aimed at the growth in grace of a brotherhood, the Irish system was content with individual lives of holiness, and, unlike the early Alexandrian mystics, or the fierce missionary spirits sent forth by the great Popes, the Irish monks did not lose their hold upon the joys of the natural world. Their poems tell us

this. A shieling in the wood ; a bush of rowan ; a clutch of eggs ; ale, with herbs ; swarms of bees and chafers, the little musicians of the woods ; birds, the choristers of God—these also went to the strengthening of their faith :—

“A few men of sense—we will tell their number—
Humble and obedient, to pray to the King :—
Four times three, three times four, fit for every need,
Twice six in the church, both north and south :—
Six pairs besides myself,
Praying for ever the King who makes the sun shine.
A pleasant church and with the linen altar cloth, a dwelling for
God from Heaven ;
Then, shining candles above the pure white Scriptures.”

In general the Irish clergy were hermit monks, living in separate cells, and the chief element in community life was the tiny oratory used by the hermits for common prayer. These little churches consisted of a nave, a western door and a small square-ended chancel. They had no apse. In certain monasteries, it was customary to keep a fire perpetually burning in the little chapel. The chapel of St. Patrick, at Heysham, Morecambe Bay, a little church 27 feet by 8, gives an idea of what the oratory of an Irish hermitage must have been in the centuries immediately following St. Patrick. The doorways were generally constructed of very large stones with a horizontal lintel, and the jambs were often inclined so that the bottom of the opening was wider than the top. In general, they were roofed with flat stones. The aisleless churches of Yorkshire, such as Adel, seem in the direct descent from these early Celtic plans.

In the sixth century, the centre of Irish Christianity was the monastery of Clonard, founded by St. Finnen about A.D. 527. From Clonard, men went out to all parts of Christendom, preaching and teaching and founding schools and colleges. Not only did these missionary efforts spread wide the gospel message, but they became centres from which Christianity grew through the ministrations of a second, third and fourth generation of missionary monks. After St. Ninian, Columba, in 563, ventured forth from his well-loved Derry, in a skin-covered coracle, to conquer the land of the Picts for Christ. In Iona, Columba built a church with walls of unhewn logs and a roof of thatch. From Iona, in A.D. 635, went St. Aidan to Northumbria, where he set his bishop's stool on the lonely island of Lindisfarne. Aidan's church was made of stones set upon layers of turf, the roof being thatched with “bents,” a reed which grows luxuriantly on the moors near Bamborough. Later the thatch of reeds was taken away and the exterior walls and roof were covered with plates of lead.

Of even more significance from the standpoint of the Celtic church builders was the life of Cuthbert, the patron saint of Durham. Born near Melrose, Cuthbert travelled in the hills preaching to the semi-barbarous dalesmen. Later he lived as an anchorite in Lindisfarne, until called to the see of St. Aidan. When he died, in 687, Bishop Cuth-

bert's tomb was regarded as of high sanctity, the honour in which it was held being increased when the head of the martyred St. Oswald was also laid in Cuthbert's tomb. Accordingly, during the sack of Lindisfarne by the Danes in the ninth century, the precious coffin was carried into the interior.

“ O'er northern mountain, marsh and moor,
From sea to sea and shore to shore,
Seven years St. Cuthbert's corpse they bore.”

A number of churches in Northern England and Southern Scotland are said to mark the resting places of the relics during this long search for safety. In 883 Bishop Eardulph came to Chester-le-Street, the old-time Roman camp near Newcastle, and there re-established the bishopric of Bernicia for more than 100 years. Finally, in 995, the holy men of Lindisfarne came to Durham, a rocky headland in the river Wear, and here they found peace and security. First, a church of “ wands and branches ” was built to shelter the bones of Cuthbert and Oswald ; then a stone chapel, and, lastly, the “ White Church ” of Bishop Aldhun, which was consecrated in A.D. 999, portions of which may be incorporated in the present Norman cathedral.

Durham cathedral was but one result of the spiritual influence of Cuthbert. In Cuthbert's monastery were four brothers, the eldest of whom was Cedd, founder of the Priory of Lastingham, a wild district in Yorkshire, “ where dragons were wont to dwell,” and where Cedd hoped that “ grass and corn should grow, and that the fruits of good works should spring where beasts dwelt, or where man lived after the manner of beasts.” In A.D. 653, Cedd made a mission to the East Saxons, building churches and ordaining presbyters and deacons to assist him in preaching and in baptising, thus foreshadowing the parochial system which was to add so many glories to English religious architecture. The church of St. Peter on the Wall, at the mouth of the Blackwater, a building largely composed of material taken from the ruins of the Roman station, Othona, seems to have been one of the churches founded by Cedd, and here he established “ a swarm of servants of Christ,” to whom he taught “ the discipline of the regular life,” meaning by this the monastic system of the Scotic Church.

When the saintly Cedd died of plague, his younger brother Chad took up the good work. He was chosen bishop of the Mercians and Northumbrians, and made his see at Lichfield—the field of the dead—where he built a church. It was not until A.D. 1148 that the shrine of St. Chad was placed in the cathedral at Lichfield, but the fame of Chad's relics is associated with the existing cathedral, as Cuthbert is associated with Durham, Erkenwald with London, or Augustine with Canterbury.

One other influence calls for mention—the founders of the Church in Wales, among them St. David, Abbot and Bishop, who built the cathedral which bears his name in a district, *angulus remotissimus, terra Saxosa, sterilis, infecunda*, following the preference of the Celtic hermits for seclusion, rather than a spot which would favour the rapid organisation

of a district won to the Church Militant. The twelve monasteries founded by David became centres for Christian study where problems of dogma were discussed and decided, though David did not omit to "lay the yoke of divine fatigue upon the shoulders" of his followers. Of David's community at Glyn Rosyn we read that, when outside labour was over, the monks were wont to return to their cells and spend the time until Vespers in reading, writing or praying.

"At vesper time, when the bell was heard, everyone left his employment, for if the tolling was heard after the top or the half of a letter was written, they rose quicker than was required for the forming of the character. Thus, silently, with no talk, they seek the church. After the singing of the Psalms, with heart and voice attuned in harmony, they prolong their genuflexions until the stars in heaven close the day. The father, however, alone, after all are gone out, pours forth unto God secret prayer for the estate of the Church."

Beautiful souls, these Celtic saints, whether in Western England, Wales, Ireland, Scotland or Northumbria. But something more than gentle piety and full-hearted enthusiasm were required if the House of God, which Christendom unconsciously sought, was to arise. Compare the Celtic saints with the men trained by Gregory in the hard school of Rome. Heirs to the *imperium* of the Roman consuls and emperors, the popes were insistent upon the necessity for one fold and one Shepherd. Whereas the Celtic bishops did not even claim a territorial jurisdiction, and maintained their office for ordination and confirmation alone, the Augustine tradition demanded a strong central authority. Indeed, the more the Church was threatened from without, the more its leaders insisted upon the necessity for an iron discipline within. In the middle of the seventh century Britain was about equally divided between the Celtic and the Roman missionaries. Already Augustine had failed to persuade the Welsh Bishops to accept the leadership of Rome, but, in Eastern England, Roman discipline triumphed. The Synod of Whitby met in A.D. 664 to decide whether the future of the Christian church in Northern England should be Roman or Celtic. One set of disputants appealed to the authority of St. Columba, the other to that of St. Peter. King Oswy, as president, suggested a method of settling the matter.

"You own," he said to Bishop Colman, "that Christ gave to Peter the keys of the Kingdom of Heaven? Has he given such power to Columba?"

Colman could only answer "No."

"Then will I rather obey the porter of Heaven," retorted Oswy; "lest when I reach its gates he who has the keys in his keeping turn his back on me and there be none to open."

So the King's judgment went in favour of Rome. Nine years later, at the Synod of Hertford, in A.D. 673, Archbishop Theodore established the parochial system by which manorial chiefs were encouraged to build churches on their estates, the English parish being approximately equivalent to the Saxon estate. Later the Christian tithe was instituted

in England, to which the country owes the preservation of its parish churches. Under an edict of King Edgar in A.D. 970 the non-payment of tithes was punishable by law, and, in time, the bishops made payment of tithe a condition of consecration when a parish church was built. In cases where a monastery was responsible for a church, the monastery usually took the tithe of corn, while the smaller tithes were reserved for the parish vicar. On the Continent the customary division was fourfold—between the clergy, the poor, the bishop, and the fabrics of the churches, though in some cases the bishop was omitted.

As has been said, most of the early Anglo-Saxon churches were of wood, or of wood and thatch. If the foundations were of stone, the upper portions were usually of hewn oak; the wealthy communities faced their wooden exteriors with plates of lead and their interior walls with plates of gold and silver. Stone construction in England seems to date from the time of Benedict Biscop (St. Bennet of Wearmouth, 628 to 690), who founded the monasteries of St. Peter and St. Paul at Wearmouth and Jarrow.

St. Bennet was a man of high learning, and made five journeys to Gaul and Italy in search of art treasures and craftsmen. He brought back masons, glaziers and metal-workers, and placed many pictures in his churches. Bede, a pupil of St. Bennet, in his life of the saint, tells that a year after the monastery of Wearmouth was built, in 674, Benedict crossed the sea to Gaul and brought back masons who built the church at Wearmouth "of stone, after the Roman manner, which Benedict always loved." The furniture and vestments which could not be made in Britain were purchased abroad, and Benedict so arranged the pictures which he brought from Rome that a scene from the New Testament was always explained by a scene from the Old. Thus Isaac, carrying wood for the sacrifice, was placed opposite Christ bearing the Cross. In the twin monastery at Jarrow, the abbey church was completed in two years and was dedicated to St. Paul. The Venerable Bede, a boy of eight years, was one of the twelve untonsured members of the fraternity at Jarrow who was present at the dedication of the basilica, and at Jarrow he was buried, though his present resting-place is the crypt at Durham Cathedral. Nothing written upon the technique of architecture throws so much light upon church building in Britain as the books of Bede, in which we can watch bodily, mental and spiritual energy combining to raise houses meet for Christian usage. In his life of Benedict Biscop, Bede tells that, in 710, Naitan, king of the Picts, asked Abbot Coelfrid, of Jarrow, to send architects to build a church after the Roman manner, promising to dedicate it to St. Peter, and that he and his people would follow the custom of the Holy Roman Apostolic church. Coelfrid sent the builders, and thus reintroduced stone churches into Scotland, following the *Candida Casa* of St. Ninian.

Benedict's friend, Wilfrid of York (634-709), was even more energetic in establishing the Roman building craft in England. When he succeeded St. Chad at York, Wilfrid found the cathedral in sad disrepair, the walls stained with rain and the aisles haunted by birds. He covered the roof

with lead, glazed the windows, lime-washed the walls and refurnished the church. At Ripon, where he built a "basilica of polished stone," with pillars of varied form, winding cloisters and arched vaults, the crypt under the present cathedral is still associated with St. Wilfrid, and is the oldest complete room in an English cathedral. With the crypt at Hexham, it remains as evidence of seventh-century work, both consisting of an oblong cell, 13 feet long and 8 feet wide, with massive walls and a passage in the thickness of the walls round three sides of the cell. There are openings at intervals, doubtless that pilgrims might see the relics exhibited in the cell, the custom being to enter by the stairway on one side, pass along the passage, and then leave by the other stairway.

The story of Hexham Abbey is typical of the circumstances under which many a church arose in early centuries of the Age of Faith. Near Hexham was fought the decisive battle of Hevenfelth, in which the Christian Oswald defeated the pagan Cædwalla in 634. Forty years later, in 674, St. Wilfrid, to whom Queen Etheldreda had given her marriage dowry, consisting of the Hexham district, decided to build a basilica on the south bank of the Tyne, close to the spot where the North and South Tyne joined. The stones were brought from the abandoned Roman town of Corstopitum, about three miles from Hexham. Having worshipped at St. Andrew's Church, on the Coelian Hill in Rome, Wilfrid desired that St. Andrew's Church, Hexham, should resemble its Roman namesake, and brought skilled builders and carvers from Italy, so that the church of St. Andrew was of great length and height, with "manifold columns and porches, a complexity of ascending and descending passages," even the cloisters having oratories and altars of their own. Near St. Andrew's, Wilfrid, at the instigation of the Virgin, built another church to St. Mary, in celebration of his recovery from a serious illness at Meux. Whereas the church of St. Andrew was built in the form of a Latin Cross, the congregational basilican type, that of St. Mary was a Greek Cross, resembling the Eastern martyreion churches. In 681 St. Andrew's Church became a cathedral and remained so until the diocese of Hexham was absorbed into that of Lindisfarne in 820. The apse of St. Wilfrid's church was at the west end, and the walls were covered with polished stone and the capitals were carved with sculptures. There were bell towers and, apparently, galleries over the aisles, reached by spiral stairways in the walls, as at St. Agnese in Rome. A Saxon frith-stool may still be seen at Hexham, this being a stone seat placed near the altar for those who sought sanctuary.

It would be easy to multiply examples of famous foundations which are associated with the great Anglo-Saxon churchmen and church-women. Etheldreda, who also received the Isle of Ely as a marriage dowry, founded the nunnery which gave rise to Ely Cathedral. Etheldreda's own church was destroyed during a Danish raid in A.D. 870, but the Benedictine monks in the time of Archbishop Dunstan secured a fresh grant of the Isle of Ely from King Edgar, and a new church was built. It cannot longer be said that "with body uncorrupted Etheldreda

rests even to this day in her white marble mausoleum," but the shrine of the Virgin Queen can still be seen in Ely Cathedral.

In the Fen district, too, the fame of St. Guthlac led to the foundation of the Benedictine abbey of Croyland. A roisterous youth, Guthlac was persuaded to retire to the monastery of Repton, where he learned to read. Later, he chose to live a hermit life in the marshes of Mercia, where he was tempted by demons, as St. Anthony had been before him, and would have fallen but for the aid of the apostle, Bartholomew. Helped by King Ethelbald of Mercia, Guthlac built an oratory in the marshes, where later arose a church built on piles, the church of St. Bartholomew, of Croyland.

Very interesting as an example of the smaller churches of Britain is that of St. Culbone, near Porlock, which lies in a wooded coombe above the British Channel, and which Dr. Cox claims to be the smallest parish church in England. It is 35 feet long, the width of the nave being 12 feet 8 inches, and that of the chancel 10 feet. The foundation may well date from the time when the hermit Culbone came from Wales with St. Dubricius in the sixth century, and ended his days in this lonely Somersetshire glen. The evidence is set out in Dr. Cox's delightful *English Parish Church*.

After St. Wilfrid's death, in 709, church building declined. There was much political unrest, which was followed by Danish incursions which almost destroyed monastic life in Britain. As in Normandy, Apulia and Sicily, however, the Vikings brought to England a tireless energy and a capacity for administration which were to become deeply rooted in the English temperament. When the wanderings of the Northmen ended in the eleventh century, the effects were quickly felt. Trade routes were secured and manufacture began. One thousand seven hundred churches were built in England between the coming of Canute and the compiling of Domesday Book in 1086, the date which marks the development of the Norman style in Britain. Earlier there was a revival of English monastic life under Archbishop Odo (942 to 959), and between 958 and 975, several of the bishops of Edgar the Peaceable, Dunstan at Canterbury, Oswald at Gloucester, and Athelwold at Peterborough, Ely and Winchester, were builders of churches and monasteries. Wolstan, the biographer of Athelwold, describing the abbey at Winchester, tells how the bishop repaired the courts of the old temple with lofty walls and new roofs, and strengthened it at the north and south sides with solid aisles and various arches. He added also many chapels, with sacred altars, until a stranger, "marvelling, crosses himself and knows not how to quit, so dazzling is the construction and so brilliant the variety of the fabric which sustains this ancient church." The minster-church at Winchester was dedicated on October 20, 980, in the presence of King Ethelred, Archbishop Dunstan and eight other bishops.

No less important in the history of English church buildings were the parish churches which arose owing to the parochial reforms of Dunstan and the efforts of local piety. Archbishop Dunstan gave reality to parochial services by ordaining that the priest should say

the seven Canonical Hours in the church at fixed times, just as if he was attached to a monastic community. Later, however, services in parish churches were restricted to Matins, Mass and Evensong, the first and last being abbreviated forms of the Seven Hours. High Mass was given at 9 a.m., but memorial masses might be said at any time. "Morrow mass" was celebrated before sunrise for the sake of travellers, say at 4 a.m.

The typical stone-built church of later Saxon times was a single-aisled nave with a small square-ended chancel. The chancel arches were usually narrow, due, maybe, to the Eastern custom of drawing a curtain before the altar so as to hide the consecration of the sacred elements from the view of the congregation. The custom was perpetuated throughout the Middle Ages by hanging a veil before the chancel arch during Lent, and hooks for the Lenten veil may still be seen in many churches. Other characteristics of the Anglo-Saxon and Danish style were semi-circular arches, occasional triangular doors, scroll-work carving and baluster-shafts. The angles of the walls and towers in Anglo-Saxon buildings were often strengthened by long upright stones, alternating with stones laid horizontally. This was the so-called "long and short" work, which is found in early churches in the Rhine Provinces. It appears to be characteristic of a district where the stone is generally small and where rubble, intermixed with bigger stones, is used. "Long and short" work, therefore, is indicative of rough craftsmanship, and marks the period before the Norman builders learnt to quarry and square big stones, as they did at Caen in the eleventh century.

Very characteristic is the Saxon church of St. Lawrence, at Bradford-on-Avon, which is connected with an abbey founded by St. Aldhelm, Bishop of Sherborn, in A.D. 705. The existing masonry, however, belongs to the period just before the Norman conquest. At Bradford-on-Avon the nave of the church is 25 feet long, the chancel being 13 feet by 10, while the north porch is 10 feet 6 inches by 10 feet. There are three small windows, one in the porch, one in the chancel and one in the nave. The outer walls are divided into three stages, the central one being decorated with an arcade of round-headed arches, rising from flat pilasters with bases and capitals. This arcade was cut after the walls were built and the stone was in position. The Saxon carving includes angels with aureoled heads, with wings expanded and maniples over their arms, suggesting, as is usual with Saxon stone-work, greater familiarity with wood work. In general, Anglo-Saxon pictures and carvings were symbolic in type, and their makers made little effort at the vivid representation of a person or event. In the early Crucifixion carving at Langford, Oxfordshire, the Christ is robed, as though wearing the crown of glory, not the crown of thorns. Later the tunic and the tunicles were replaced by the loin-cloth, an indication that insistence upon the bodily sufferings of Christ was now regarded as an all important part of the Church's teaching in connection with the sacramental efficacy of pain.

The church at Bradford-on-Avon is to be compared with the earlier

churches of wood, which have long disappeared. As has been said, the only Anglo-Saxon timber church remaining is that at Greensted, Essex, where the walls were built of halved-trunks of oak trees, placed side by side, the rounded halves being outside. Such churches of wood were the origin of the Saxon masonry, which recalls timber work, though it is really rubble concrete, faced with stones, which take the place of the earlier beams of wood.

Another characteristic of late Saxon churches was the western tower built above the western porch. It was more than a place for a bell. Rather the Saxon tower was an aid to defence, as might be expected in times when danger was continual. For this reason the Saxon tower was not built for height, like a Moslem minaret or an Italian campanile, but for massive strength. Fifty or more of these Saxon towers remain, which arose under the influence of the building tradition common in England before the Conquest. A characteristic example is the fine tower of Earl's Barton, which was built from rubble concrete, but was faced with stone beams which give it the appearance, at a distance, of being made from wooden beams. When Judith, niece of William the Conqueror, built Earl's Barton, she included the tower of the Saxon church within her castle, so that it might be an aid in the defence of the bailey and not a danger. Owing to these western towers, the south porch in an English church tended to be the principal entrance, the western door being only opened on festal days, such as Palm Sunday, when the clergy and choir entered by this door. If the west door was covered by a porch, this was called a Galilee, the name being due to the fact that the west porch was the last stage in the Sunday procession. The celebrant, being the first to enter, symbolised Christ entering into Galilee after the Resurrection. There is a beautiful Galilee at Ely, but it may occasionally be found in parish churches.

The south porch, as the place of common entry, was provided with a holy-water stoup. At Canterbury, it was a resort of litigants, an altar being added for solemnising legal oaths. Indeed, a church, whether belonging to a parish or a community of canons or monks, served many purposes which would be deemed secular in our days, doubtless due to the fact that the rood screen shut off the nave from the sanctuary containing the high altar and made such secular uses possible without irreverence. At St. Edmund's, Salisbury, children danced around a maypole in the nave in the fifteenth century, and at Northampton, the burgesses held their meetings in the nave of St. Giles until 1488. Frequently fairs were held in the churchyard, and the "church-house" nearby was used for "church-ales" and the brewing and baking incidental to the feasts. Frequently, a plough was kept upon the tower for use on the Monday following Epiphany (Plough Monday) when Mother Church exercised the pagan privilege of blessing the fields, making them ripe for harvest. The common folk and their leaders, the lords of the manor, built our village churches, and the fact must ever be borne in mind if the form and decoration of these churches are to be understood. Where lords of the manor built the first village church, the priests were their private chaplains, a reason why many livings are

still in the gift of the squire. In some cases a covered gallery connected the church and the manor house.

From the Isles of the North went English and Irish missionaries for the conversion of mid-Europe. At first, companies of British Christians fled overseas to escape the Anglo-Saxon heathen, among them the monkish migrants who crossed to Brittany (Armorica) in the sixth century, and built, first a few rude huts, and then a wooden chapel and refectory. Later there was a definite effort by British priests and monks to evangelise the heathen continent. St. Columban, born A.D. 543, was an Irish missionary who worked among the Burgundians in the wild country of the Vosges and founded monasteries on the model of Bangor ; he helped to convert the Lombards from Arianism to Roman orthodoxy. Columban's disciples from Burgundy brought about the conversion of the Bavarians in A.D. 696. St. Boniface, a monk of Crediton, in Devon, was ordered to Germany by Pope Gregory II. about A.D. 720, and his life-story is typical of the work done by missionaries from the Isles of the North. Reading of St. Boniface, we trace the transition from an age of magic-ritual, through a period of grove worship, to full Christian faith, with its recognition of a personal god who can be propitiated by sacrifice and influenced by prayer. Willibald, in his life of Boniface, recalls how the groves, with their magic associations, retained their power to attract long after the people of the forest lands were "confirmed by the grace of the sevenfold spirit." Of the Hessian converts, Willibald tells that "some were wont secretly, some openly, to sacrifice to trees and springs ; some in secret, others openly, practised inspections of victims and divinations, legerdemain and incantations ; some turned their attention to auguries and auspices and various sacrificial rites ; while others, with sounder minds, abandoned all the profanations of heathenism and committed none of these things."

Following the counsel of the confirmed Christians, Saint Boniface, at Gaesmere, determined to fell the sacred tree known as the Oak of Thor. But when the Saint cut the lower notch, a great multitude of pagans ran to the spot cursing the enemy of their gods. Bringing his axe to bear upon the other side of the tree, "suddenly the oak's vast bulk, driven by a divine blast from above, crashed to the ground, shivering its crown of branches as it fell ; and, as if by the gracious dispensation of the Most High, it was also burst into four parts, and four trunks of huge size, equal in length, were seen. At this sight the pagans who before had cursed, believed and blessed the Lord. Then, moreover, the most holy bishop, after taking counsel with the brethren, built from the timber of the tree a wooden oratory and dedicated it in honour of Saint Peter, the apostle."

The zeal of these missionary monks, combined with the organisation controlled by the Popes at Rome, forced Western Europe to accept the tenets of Catholicism, and, in consequence, to build churches fitted for the service of the Mass and the special needs of the Benedictine monks. The Swiss and Bavarians were converted in the seventh century ; the Frisians, the Thuringians, the Hessians and the Saxons in the eighth.

Denmark was nominally converted by Ansgar about A.D. 825, though Christianity was not established there securely until the eleventh century under Canute. Bohemia accepted Christianity in A.D. 894, while Russia was converted by Greek missionaries from Constantinople in the tenth century, about the time that Hungary, Poland, Norway and Sweden joined the Roman church. After 1,000 years Europe was ready to don her new White Robe of Churches.

The lesson to be learnt from the Isles of the North is that the Age of Faith was an essential prelude to the effort which gave Western Europe its Gothic cathedrals. The spiritual force which persuades men to long-continued labour is necessary if a great church is to arise, and Britain was fruitful soil for such faith during the centuries in which Christendom was in the making. But for the other essential, craft knowledge and skill, we must return to Italy, where contact with the Roman building tradition was not entirely lost during the Germanic incursions.

One other influence must be remembered. Pressing in upon Christendom from Southern Spain on the west and from Syria on the east, was the power of Islam, ever-present, though not always to be felt by a careless observer. That the elements contributed to architecture by the Moslem builders may be ever in mind, it will be worth while to pass for a time from the Christian House of God and consider the growth and character of art in the world of Islam.

CHAPTER IX

THE ARCHITECTURE OF ISLAM

Islam is the name Mahomet gave to the religion which he founded among the nomads of Arabia, upon a basis of Judaism. The word means " submission to God." Using Islam as a rallying cry, Mahomet fixed the foundations of a spiritual empire, which finally extended from the Pyrenees in Spain to the mouth of the Ganges in India. Whereas Christianity proved itself the heir of the Roman civilisation in the west and north, Islam took possession of the Greco-Roman lands in Syria, Palestine, Egypt, North Africa and Spain, and also established empires, which included Persia, Northern India, and a part of China. Before they heard the rallying cry of Islam, the Arabs were vagabond nomads, who preferred a wandering life in the uplands of Arabia to the richest civilisation. Islam made the Arabs conquerors and townsfolk.

Arabia was never absorbed into the Roman Empire as Asia Minor had been. When the Western Empire was invaded by the barbarians from the North, the Arabs had an opportunity to found a stable polity, and they accepted the chance which came during the quarrels of the Eastern Roman Empire and Persia. Then, under the inspiration of Islam, the Arabs threatened to overrun Christendom itself.

By A.D. 600 the times were ripe for a rebirth of the ancient faith of Abraham. Mecca (the word means " Sanctuary ") had long been a holy city for the Arabs of the neighbouring steppes owing to its possession of the Kaaba, a square temple built of unhewn stones, in the wall of which was set the " Black Stone " from Paradise. Legend told that the temple was built by Adam, and was restored by Abraham after the Flood. Three hundred and sixty tribes placed their clan deities under the protection of the Black Stone. But Mecca was not all ; there was also Medina. While Mecca was situated at the edge of the steppe country, and was controlled by men of Bedouin sympathies, Medina stood in a fertile oasis at the foot of the hills, in a district of dates, barley and wheat. The people of Medina were not nomads but agriculturists. Moreover, a considerable part of the inhabitants of Medina had accepted the Jewish faith, another cause of rivalry with Mecca and the custodians of the Kaaba. To Mahomet came the idea of converting the Kaaba into a temple to the Jewish-Christian God, thus establishing a new monotheistic faith more fitted for the Arabs than Judaism itself.

Mahomet was 40 years of age when he received his first " divine " communication in the solitude of Mount Hira, near Mecca, in the form of a message by the mouth of the archangel Gabriel. Four years later, he commenced preaching in brief rhymed sentences, after the manner of Arabic soothsayers. In A.D. 622, he was forced to flee from Mecca

to Medina, and the flight proved the first step towards the unification of Arabia. Mahomet's followers raided the caravans of the Koreish tribe on their way to Syria, and, when the people of Mecca defended themselves, they were defeated. Adventurers who flocked to Mahomet's standard were rewarded by grants of land. By 627, the people of Mecca were glad to agree to a ten years' truce. Realising the consolidating effect of a place where his followers could meet, Mahomet determined that Mecca should remain a centre of pilgrimage. Mahomet also instituted Islam as a caste distinction. Once a man was admitted to Islam, he was equal to all within the caste and the superior of all without. Later, in 630, Mahomet captured Mecca, destroyed the 360 idols, and established the new religion there. Other tribes were now ready to join, and, in A.D. 632, Mahomet was projecting an expedition against Syria when he died, and was buried at Medina.

Entering the sacred burial enclosure at Medina, the Moslem pilgrim of to-day sees a labyrinth of granite columns, each a monolith, 40 feet from base to capital. To the left is an open space with a fountain, and at the end of one of the stone avenues is the pulpit, from which the prayer for the Kaliph is offered every Friday. During the Friday service, when the name of Mahomet occurs, the Imam turns in his pulpit and invokes "Him who is sleeping here." The tomb of Mahomet is a rectangular building about 35 feet by 25, and is surrounded by a grille, through which the faithful may look upon the tombs of the Prophet and the Kaliphs who succeeded him—Abu Bekr, Omar and Osman, and the grave of Fatima, Mahomet's only child. Above the tomb of the Prophet is a dome of green, glazed tiles, which gives rise to a popular name for Mahomet, "Him of the Green Dome." The tomb itself is covered with a plain green pall, and a diamond, almost as big as the Koh-i-noor, is set over the spot where the head of the Founder of Islam rests.

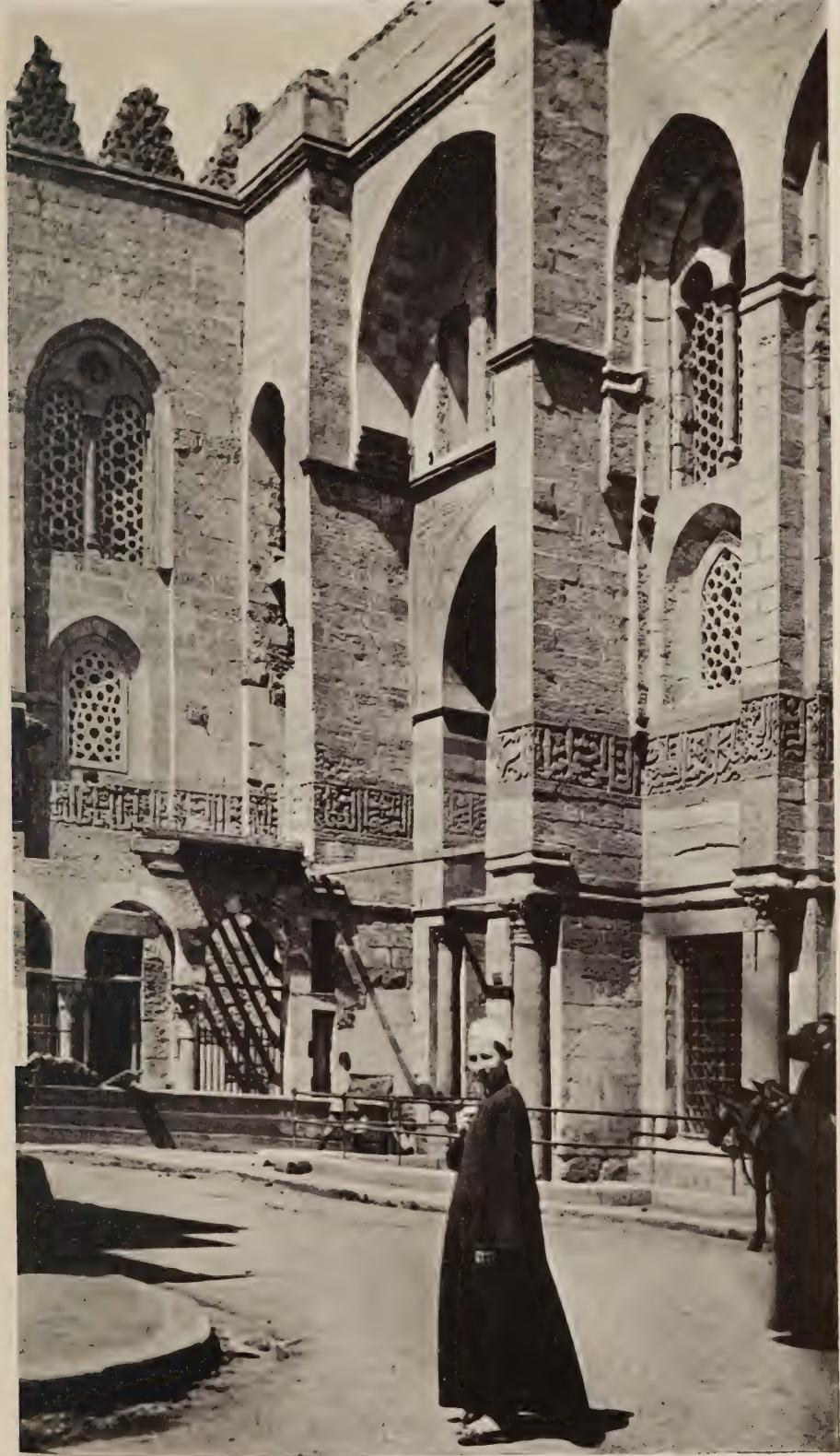
Moslem tradition tells that when Mahomet entered Medina in 622 he made up his mind to build a house at the spot where his camel stopped. The plot of land was fortunately for sale, and Mahomet enclosed it with walls, so that it became an open court about 100 cubits square, with a dwelling-house near by. Originally the *kibla*, the direction in which a Moslem turns for prayer, was in the north wall, looking towards Jerusalem, and was covered by a small roof supported by trunks of palm. In 624, Mahomet changed the *kibla* from the temple at Jerusalem to the Kaaba at Mecca. This was the origin of the Moslem *mihrab*, or praying niche. At first Mahomet addressed his followers from a palm trunk fixed in the ground; later, a pulpit was made of tamarisk wood with three steps, which became the *minbar*, or pulpit, of the modern mosque. From the summit of the roof, Bilal, an aged follower of Mahomet, called the Moslems to prayer, and the custom led to the public crier calling the faithful to prayer from the minaret. When Mahomet's courtyard was rebuilt in the seventh century, these elements became fixed, and they were adopted throughout the Moslem world.

Even more sacred to the Moslem than the burial place of Mahomet

is Mecca. What Mecca was at the time of Mahomet's death for a few Bedouin tribes, it is to-day for the Mahometan world. During the months of the Pilgrimage, Mecca is a vast club where Mahometans of every type and class forgather and discuss political and social problems. The ceremony of Compassing the Kaaba is still the central episode in a Moslem pilgrimage. The square Kaaba stands on the spot where Adam is said to have worshipped after his expulsion from Eden, and here, Moslem legend tells, a temple of stone was built by Seth. The present Kaaba is a square building of dark stone, 14 yards long, 11 yards broad, and 16 yards high. The double roof is raised upon pillars of aloe wood. Inlaid in the wall of the Kaaba, the Black Stone can still be seen, which was an object of pilgrimage centuries before Mahomet, and which the prophet left as a symbol of the One God. The interior of the Kaaba is encrusted with jewels, the heirlooms of centuries. From the walls and ceilings, on delicate gold chains, hang vases of gold of rich design. Faithful Mahometans turn to the Kaaba five times a day. Those in Persia and India turn towards the north-eastern wall of the Kaaba ; those in Syria to the northern wall. Most honourable of all are the Moslems, who chance to face the southern wall where the Black Stone is kept, and most blessed are the prayers said in Mecca itself. When a pilgrim sets out he is requested by his friends to pray for them in the Kaaba. On his return he must allow himself to be kissed four times by every person he meets between the gate of his town and the threshold of his home. A herald goes before the pilgrim crying :

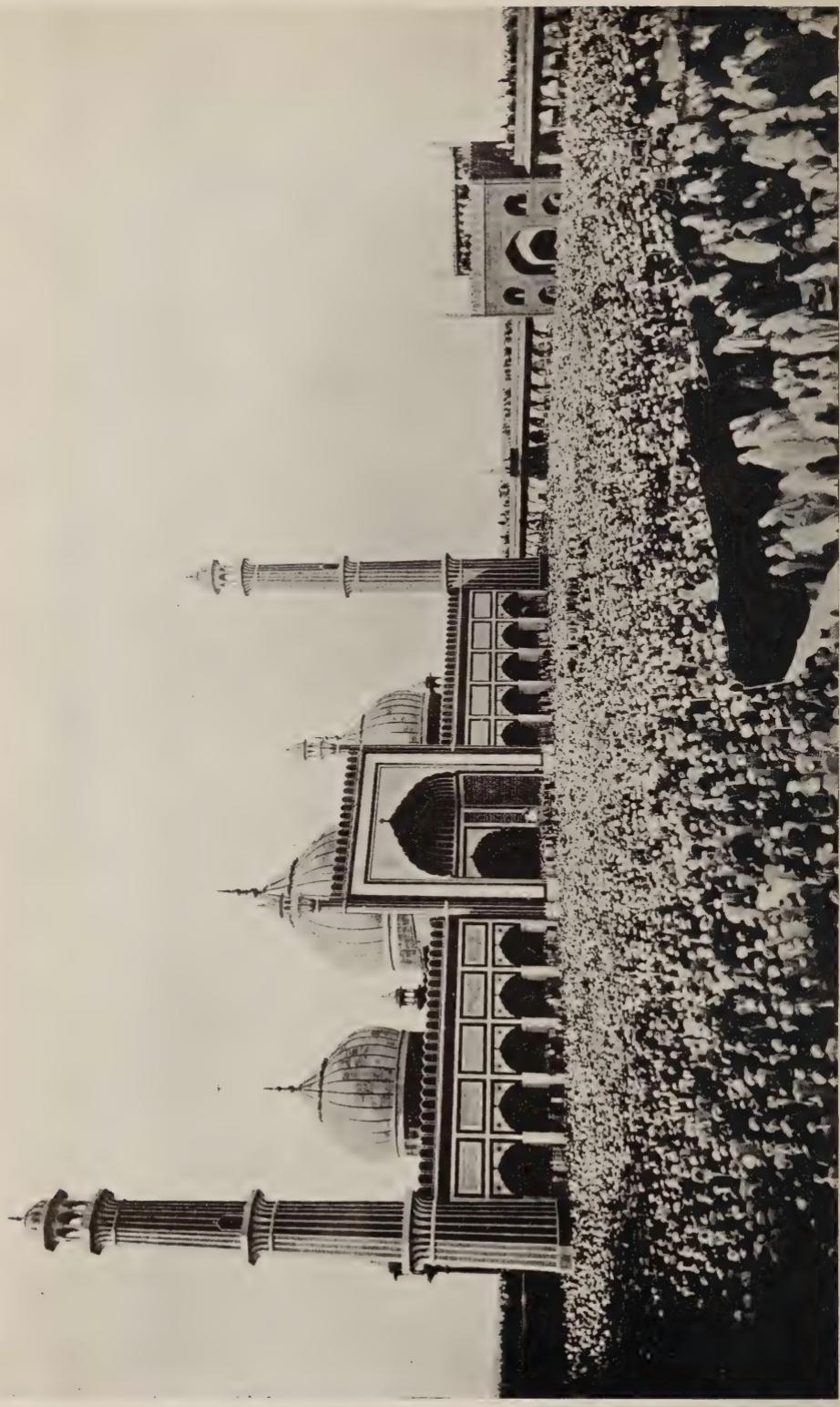
“ Come men ! Here comes the pilgrim of the Blessed Kaaba, the House of Allah. Come and kiss his cheeks and mouth and hands, that you may be comforted and strengthened.”

On the political plane Mahomet offered to the Arabs what Moses had given to the Jews—the possibility of national unity. The Koran—“ That which should be read ”—had the binding force of the Jewish Old Testament. “ There is no deity but God, and Mahomet is His Messenger,” had the same potency as a political force as the opening words of the Bible, “ In the beginning, Jehovah.” But the Arabs brought no body of architectural experience with them, and the House of God under Islam was evolved under circumstances which differed greatly according to whether the mosque was in Spain, Egypt, Syria, Mesopotamia, Persia, or India. What the mosques of Islam had in common were the non-architectural factors dictated by the forms of Moslem worship. The first Moslem temple at Medina was a courtyard, partly roofed with palm branches and containing a prayer niche. Such an open court with arcades remains a prime essential in a Moslem House of God to this day. Later, halls with slender columns supporting their roofs were built against the side of the courtyard in many places, but the familiar dome was not an original element in the architecture of a Moslem mosque. A dome is the sign of a tomb, not of a church. Many mosques, however, arose around the tombs of their founders. In general, though the congregational characteristic is seldom entirely wanting, a mosque is a place for private devotion and prayer, rather than a place

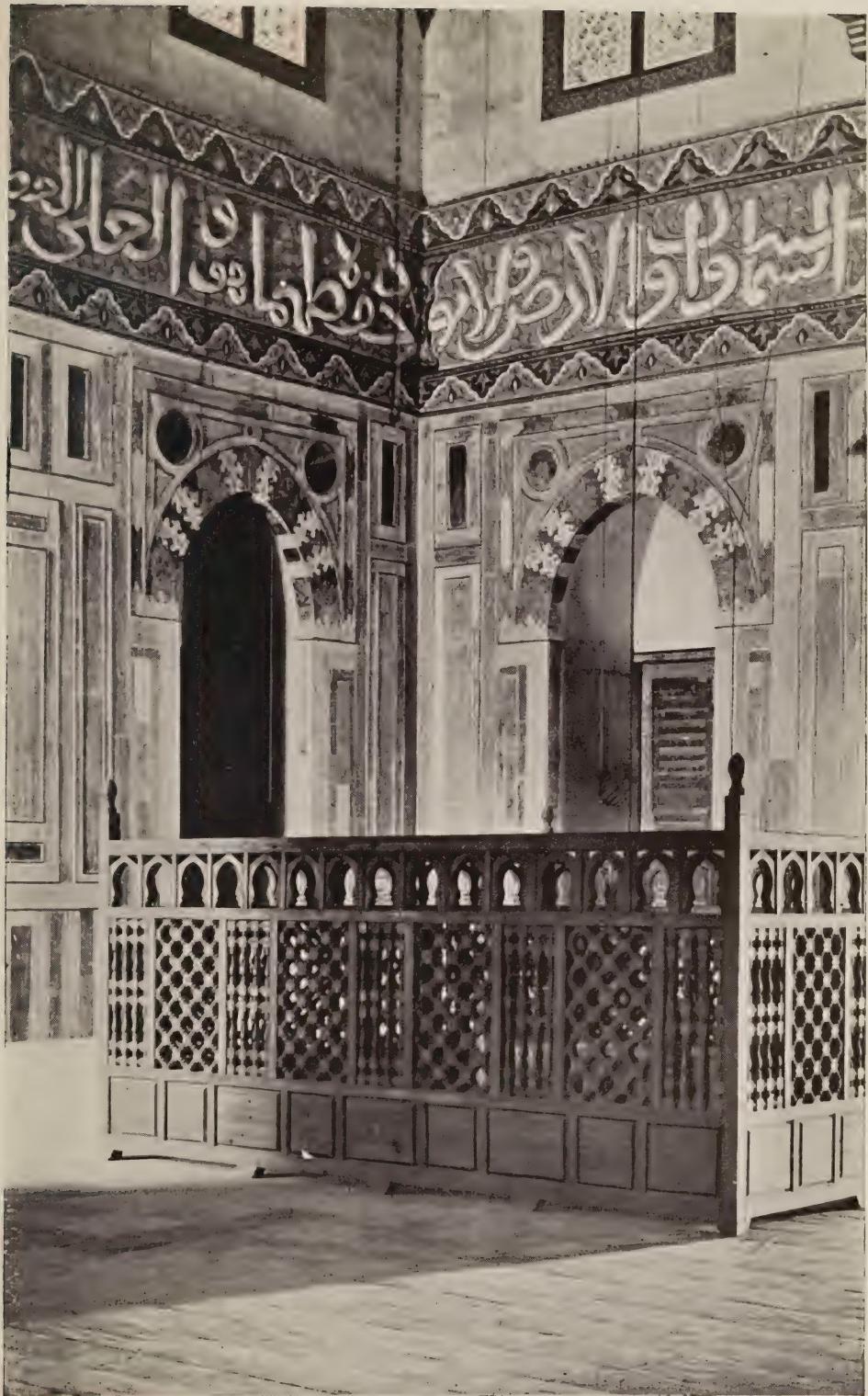


THE KALA-UN MOSQUE, CAIRO

(see page 136)



THE JAMA MASJID, DELHI, DURING THE FRIDAY PRAYER MEETING.



CENOTAPH OF THE SULTAN HASSAN, CAIRO

(see page 140)

THE MOSQUE AT CORDOVA



of public worship, but the courtyards of the large mosques were devised for the great gatherings at the Friday services and festal days. A fountain or tank for ceremonial washing, a covered cloister, affording shelter from the sun and rain, and a minaret, from which the public-crier can call the faithful of Islam to their devotions, are primary requirements. Inside, there must be a *mihrab*, or praying niche, a *minbar*, or pulpit, from which the Koran is read, and a platform from which the priest intones the prayers. The beautiful praying-niche and pulpit in the Mosque of Bourdeni at Cairo are typical. In general, the art of Islam did not allow of representation, and covered its walls and domes with surface-filling ornament in which the human figure was avoided. Images were accursed in the eyes of the Moslem, at any rate if he followed the canonical rule of the Sunni. As the Koran forbade the making of any graven image, or the likeness of anything in heaven or earth, a premium was set upon the development of geometrical design.

Slant-cut surfaces, colour, cunningly-devised schemes of light and shade, and sheer mastery of formal design were the means upon which the Moslem relied for his most telling architectural effects.

Though certain appointments in each mosque answered to the needs of Islam, Moslem architecture and decorative art developed in widely-distributed communities, with little in common except the fact that they had been forced at some time or other to submit to the armies of the Moslem conquerors. Damascus fell to the Arab arms in A.D. 635, within three years of Mahomet's death. The great Temple of the Sun, which had been converted into a Christian church in the fourth or fifth century, was divided into two parts, one half being Moslem and the other remaining Christian, until Walid I. took possession of the whole building in the eighth century and converted it into the famous mosque which still bears his name, and is reckoned fourth among the mosques of the Moslem world. It covers a rectangular site, 530 feet by 320, about half the enclosure being occupied by the Moslem church, the rest being the open court with its covered walks. The actual church is 140 feet long, and is divided into a nave and aisles by arches rising from columns with carved capitals, which, in turn, carry the tier of smaller arches supporting the roof. In the great days of Damascus, a dome, decorated with carved rosettes and designs in colour and gold, rose above the building. The Mosque of Walid was burnt in 1893, but has been restored.

Jerusalem capitulated in 637, a year after Damascus, and a mosque was built on the site of Solomon's temple, the central point being the sacred rock of Zion. The "Mosque of Omar" (p. 48) seems to have been built by Abdal Malik, who ruled Egypt in the eighth century, in the hope that he might divert pilgrims from Mecca to Jerusalem. Workmen were brought from all parts of the Moslem world and the wealth of Egypt was spent freely. The Mosque of Omar is an octagon with four porches, three concentric colonnades surrounding the sacred rock in the centre. The whole, including the dome above the sacred rock, was decorated with marble mosaic work, after the manner of Walid's mosque at Damascus.

Inflamed by the success which won them Damascus and Jerusalem, the Arabs spread into Mesopotamia and Persia on the one side, and into Egypt and Northern Africa on the other. In time, the Arab armies abandoned the tribal organisation which gave them their early victories and became mercenaries, forming the personal bodyguards of successful commanders and rulers. Later, the Moslem leaders were Turks, or any other race which provided soldiers of courage and decision. In the time of Mahomet and Omar, Arabia had been the centre of Moslem power, but when Syria, with its agricultural wealth and large population, was taken, Arabia was relegated to a second place. Then came an age when Persia was the centre of Moslem effort and the army commanders learnt the power of Islam as a rallying cry for overcoming geographical conditions which tended to break up social units into small groups. In the eighth century Bokhara and Samarkand were taken. Only the folly of the Kaliph Suleiman stopped the progress of the Moslem arms. Later, the region under the sway of Islam was larger, but there was never the same central control again. Thenceforward, the history of the Moslem empire is a record of sectarian quarrels, family strife and army revolts. In the end three Kaliphates were established, one with its centre at Bagdad, a second at Cairo, and a third, ruling Spain, at Cordova.

The architectural glories of Bagdad and the Eastern Kaliphate were only less memorable than those of Spain, but space will not allow of even a summary of the manifold achievements of Moslem art and architecture. All that can be done is to recall a few characteristic buildings which suggest the form a House of God took in the various parts of the Moslem field of conquest. Perhaps the abiding glories of the Moslem art can best be gauged in Cairo and the Mogul capitals of Northern India.

MOSLEMS IN EGYPT

From Damascus and Jerusalem the Arab conquest passed to Egypt, an easy prey. 'Amr ibn el-'Asy entered Egypt with 4,000 followers and defeated the Byzantine garrison near Memphis, with some aid from the Christian Copts, who represented the ancient Egyptian population, which had never fully accepted Greek, Roman or Byzantine rule. By A.D. 641 the Arab conquest of Egypt was complete, and as Alexandria was an unsuitable capital for the inland Arabs, 'Amr founded the "Town of the Tent," which, centuries later, developed into Cairo. It was one of the duties of an Arab leader to recite the weekly prayers and preach the Friday service to his followers. For this purpose 'Amr built the Mosque of the Conquest close to his home, this being the first mosque built in Egypt. It was originally a simple rectangular meeting-place, 200 feet long, built of brick, with a low roof supported by columns. There was not even a prayer-niche or pulpit. The Mosque of the Conquest was rebuilt again and again, and devout Moslems still believe that prayers offered there are received with special favour by

Allah. The central court is 40,000 feet square, and the roofed colonnade at the east end is supported by a forest of columns taken from Egyptian, Greco-Roman or Byzantine buildings. The wooden beams between the columns once carried the 18,000 lamps which illuminated the mosque in the days of its glory.

Of equal interest, but of far more intrinsic beauty and architectural significance, is the Mosque of Ibn Tulun, built by the man who first freed Egypt from the control of the Kaliphs of Bagdad. Until 856, the Egyptian governors were Arabs; later they were usually Turks. The luxury-ridden Kaliphs, fearing alike the Persian principalities near home and the turbulent Arab chiefs abroad, began to rely upon the Turkish fighting men from the Oxus region, who were first recruited as members of the personal bodyguard of the Eastern Kaliph. In time, the Turkish leaders seized the offices of state in Bagdad, and offered the control of the western provinces of Islam to their friends. Ahmad Ibn Tulun came to Egypt in A.D. 868 as the representative of his stepfather Bakbak, a Turkish emir of Bagdad, who held Egypt as an office of profit. Ibn Tulun quickly proved his worth as an administrator and became sole ruler of the province. Ibn Tulun marched into Syria and occupied the country to the upper waters of the Euphrates. The Cairo mosque, which bears his name, is noteworthy because it was built with brick piers and arches and not from pillars taken from earlier temples or churches. The arches are pointed (the horseshoe tendency is barely noticeable) and preceded the pointed arches of Christendom by several centuries. The central court of Ibn Tulun covers three acres, the *mihrab*, showing the *kibla*, being placed in a sanctuary in the south-east arcade. Instead of a minaret, the mosque of Ibn Tulun has a curious corkscrew tower with an exterior winding stairway, recalling a Mesopotamian *ziggurat*. The decoration of the mosque was Coptic, as indeed was the design, the architect being a Christian Copt, but the real builder was Ibn Tulun himself, whose energy found the needful funds and whose administrative ability made great public works possible in Cairo. "Give to everyone who holds out his hand," said this royal giver, who came to Egypt as a penniless adventurer, and left the country of his adoption a powerful and independent State.

No apology is required for mingling a narrative of conquest, tyranny and extortion with the architectural details of the Moslem House of God. All the greater mosques were built either by a mighty ruler, or, if the political conditions were too difficult for him, by his successor, before the wealth accumulated by conquest and extortionate taxation had been taken over by yet another man of might, goaded to generosity by the promise of Mahomet :

" Whosoever builds for God a place of worship, be it only as the nest of a grouse, Allah buildest for him a house in Paradise."

It might be Walid in Damascus, or Abdal Malik in Jerusalem, or Ahmad ibn Tulun in Cairo, but always the Moslem mosque arose at the instance of an individual ruler, never as a result of religious enthusiasm such as produced the rock-cut temples at Ellora, or the communal

effort which produced the cathedrals of Northern France. The Cairo mosque, el-Azhar, known as "The Resplendent" (A.D. 972), was built by the founder of the Fatimid Kaliphate which ruled Egypt for 200 years. It was associated with one of the famous universities of Islam. The Mosque of the Kala-un, dating from 1287, is also associated with a theological college. As it was not built for congregational worship, the open court and cloisters are replaced by four transepts, which were assigned to the four orthodox schools of Islam, each transept being the place where a group of students listened to the expositions of its professor, Shafi'y, Maliky, Hanafy or Hanbaly, as the case might be. The Kala-un Mosque differs from an ordinary congregational mosque, as a monk's church in Christendom differed from a communal cathedral. Another example is the beautiful mosque built by the Sultan Hassan about 1356. Here the central feature is the domed tomb of the founder and the minaret, other buildings being the lecture rooms, libraries and lodging houses of the students and professors. The decorative scroll work, done with a tool in soft plaster, in the mosque of Kala-un is of rare beauty. Later, the arabesque pattern-work was cut in limestone or marble. The Kait-Bey Mosque (A.D. 1472), among the so-called Tombs of the Kaliphs, shows the Moslem art of arabesque at its best. Beautiful, too, as an achievement in architectural planning, is the conjunction of the rectangular church with the ornate minaret and sculptured dome.

The Kala-un takes its name from one of the great Turkish and Circassian feudal lords, the Mamluks, who ruled Egypt after Saladin's death for 250 years. Kala-un reigned from 1279 to 1290 over a kingdom extending from the Euphrates to Southern Arabia, including the holy cities of Mecca and Medina. His military strength was proved when he drove off the Mongols in 1281, as his predecessor, Beybars the Great, had done a generation earlier. The Sultan Hassan crossed swords with Louis of France, while Kait Bey ruled between 1468 and 1496, a fact which sufficiently testifies to his military prowess. Born a slave, Kait Bey was sold for 25 guineas. Slowly he proved his worth until he became commander-in-chief. His energy, courage and decision in the office so dominated rival feudal chiefs that Kait Bey ruled for almost 30 years, and rivalled Kala-un as a builder. Always, the Arabs, Turks or Circassians were not the architects, builders or decorators of the public works which bear their names, but the directors of the art-fund and the final arbiters of taste. For this reason, the Moslem House of God witnesses less to the devoutness of the individual believer than to the might of rulers who dominated countries of vast economic potentialities.

MOSLEMS IN INDIA

The Moslem conquest of India began from Ghazni, a small state in Afghanistan, which became powerful in the eastern Moslem world in the tenth century. Under Mahmud (997-1030), the Afghan cavalry triumphed over the big, but undisciplined, armies of Northern India,

and the Punjab was forced to adopt the Moslem faith. Then came the Mongol invasions from Central Asia. In A.D. 1258, Bagdad was taken from the Eastern Kaliphate and the Mogul Empire in India followed. Its results remain in the form of acute political problems, vivid historical records and temple architecture of abiding beauty and interest. The Moslem conquerors of India butchered Buddhist and Brahman monks freely, but they spared skilled Hindu craftsmen. It is recorded that Mahmud of Ghazni carried away hundreds of Indian and Persian craftsmen to Afghanistan, and this policy of utilising the skill of conquered peoples was followed by the Mogul emperors.

As in Syria, Egypt and Spain, the Moslem House of God in India must be regarded as the work of native craftsmen, working under Moslem organisers, who provided the material resources and a rough indication of their particular requirements. Moslem architecture in India can only be understood if the ages-long tradition of the Hindu craftsmen is remembered. The great portals seem to have been of Persian origin, while the Moslem dome was a development of the Buddhist *stupa*, though it embodied a very different political and religious significance. What was Moslem was the feeling for line and mass, and the taste displayed in surface decoration. What the Indian House of God lost in spiritual significance, it gained in logic, clarity and harmony. Just because Moslem architecture has not the symbolic meaning of earlier Hindu art, it has a higher æsthetic value.

This, by way of warning. When the over-lavish decoration of a Hindu temple is contrasted with the chaste design and ordered beauty of a Moslem mosque, the judgment wavers between the satisfaction which arises from formal beauty and that which rightly arises from the sense of human emotion finding expression, with difficulty, it is true, but finding expression. The argument of this book will have had less than its due effect if it has failed to suggest that, in religious art, beauty and significance are of equal importance. In forming an æsthetic judgment it is possible to separate the one from the other, and when a Buddhist or Hindu temple is compared with a mosque of one of the Great Moguls, admiration for the æsthetic grace of the Moslem achievement should not blind the judgment to the high significance of other Indian architecture and sculpture which witness to different values, but, nevertheless, to values which have proved themselves of rich importance in human history.

It will be remembered that the dark ages of India, about A.D. 800, coincided with a similar period in European history, dark, because both India and Western Europe were threatened by vast bodies of invaders, who left the inhabitants little opportunity for cultivating the arts and sciences. Northern India was divided into small kingdoms, which formed a loose confederation under Rajput princes. About A.D. 1000 came the twelve expeditions of Mahmud of Ghazni, and after A.D. 1225 the invasions of Ghenghis Khan and Timur. When Timur died, in A.D. 1405, he ruled from the Dardanelles to Delhi. He was followed by Babur, conqueror and administrator, and Babur's grandson, Akbar. With Akbar, Moslem architecture in India reached full beauty and

significance. Three other emperor-builders followed, Jehangir (1605-1627), Shah Jehan (1627-1658) and Aurangzeb (1658-1707). With Aurangzeb, Mogul domination ended, and the empire of the British Raj was built from the fragments of the shattered empire.

Akbar's reign commenced in 1559, and at his death, in 1605, he ruled an empire which included Kabul, Kashmir and Kandesh in the Deccan. Desiring to unite all castes and races, Akbar constructed a state religion which was catholic enough to be accepted by Hindus as well as Mahometans. An inscription, written by Akbar's counsellor, Abu'l-Fazl, for a temple in Kashmir, has already been quoted and suggests what this creed was.

"Oh God, in every temple I see people that see Thee, and in every language I hear spoken, people praise Thee.

"Polytheism and Islam feel after Thee. Each religion saying : 'Thou art one, without equal.' If it be a mosque, people murmur the holy prayer. If it be a Christian church, people ring the bell from love to Thee. Sometimes I seek the Christian cloister and sometimes the mosque. But it is Thou whom I seek from temple to temple. Thy elect have no dealings with heresy or with orthodoxy. For neither of them stands behind the screen of Thy truth. Heresy to the heretic and religion to the orthodox, but the dust of the rose-petal belongs to the heart of the perfume-seller."

Akbar controlled an immense art fund and could call upon an unrivalled body of builders, sculptors and designers. Earlier conquerors had often converted a Hindu temple, which, with its large vaulted court, was readily transformed for Moslem religious use. Akbar built not only temples anew but cities. He raised the city of Agra on the site of a village, and named it after himself, Akbarabad. What Benares and Patna are to the Hindus, Delhi and Agra are to the Moslems of India. Shah Jehan rebuilt Delhi between 1638 and 1648. Bernier, writing in 1663, tells that Delhi was built in crescent form on the right bank of the Jumna, the circuit of the walls being six or seven miles. Outside were the suburbs, where the rich merchants lived with their courtyards and gardens, fountains and cool, matted chambers open on all sides to the winds. Two main streets led to the Emperor's palace. The inscription on the wall read :

"If there be a Heaven upon earth, it is Here, it is Here."

Perhaps the final criticism of the Moslem House of God is that its builders found "heaven" in the palace rather than in the mosque. Nevertheless, the might of the Moguls found expression in churches of rare beauty. None is more lovely than the Pearl Mosque (Moti Masjid) built by Shah Jehan at Agra, the white, blue and grey marbles used being responsible for the name. The front consists of seven arches and is surmounted by cupolas ; in the centre are three lofty marble domes, supported by pearl-coloured pillars. In the centre is a large marble tank. The floor of the mosque is divided by black and yellow

marble lines into 600 divisions, corresponding with the Moslem Masalas used for prayer. Equally famous is the Pearl Mosque built by Aurangzeb within the fort at Delhi. The photograph of the Jumma Masjid at Delhi pictures the exterior of the mosque during the Moslem Friday prayer meeting.

Not strictly a House of God, but very characteristic of Mogul art and the influences which brought its happiest examples into being, is the Taj Mahal at Agra. This was built by the Emperor Shah Jehan, that a well-loved wife might have a memorial as beautiful as she had been in life and, himself, a worthy tomb. Though a tomb, the Taj Mahal, and similar buildings of the Great Moguls, had some of the characteristics of a House of God as Eastern peoples understood the thing. A pavilion, consecrated as the tomb of a great ruler, was a shrine for pilgrims. Prince Jehan met his future bride at a charity bazaar, where the Emperor, his father, had ordered his nobles to pay whatever was asked for the goods on sale. Jehan stopped before the booth of Arzumund Banu, daughter of the vizier Asiph Jehan, and already the wife of Jemal Khan. With pretty impudence, the young beauty asked a sum equal to £12,500 for a bon-bon of sugar-candy. Jehan paid the toll and asked Arzumund to visit his palace, where she stayed for three days. Jemal Khan was none too pleased at the honour done to his bride, but self-interest and discretion alike demanded the sacrifice. He exchanged his wife for a command of 5,000 horse, and Arzumund became Mumtaz-i-Mahal, "the Elect of the Palace."

The Taj Mahal was begun in 1631, after the death of Mumtaz-i-Mahal in childbirth. Twenty thousand men were employed for 20 years in building it. The Emperor seems to have employed the builders who had previously set up the domed tomb of Ibrahim II., and his wife Taj Sultana, in Bijapur. A manuscript in the Imperial Library at Calcutta records that the three principal designers of the Taj were each paid 1,000 rupees a month, six others receiving 400 rupees, and nine others 200 to 400 rupees, payment which contrasts favourably with the £200 a year which Wren received in the same century as architect of St. Paul's. The Taj stands on the banks of the Jumna, about a mile beyond the walls of Agra, in a setting of cypress trees and shadowed pools, which would haunt the imagination, apart from the pearl-grey dome of marble, inlaid with jasper, bloodstone and agate, which rises from the dark grove to the sapphire sky. The Taj is built upon a marble platform, 18 feet high and 313 feet square, the mosque being 186 feet square and having a minaret at each corner, 138 feet high. The central dome is 80 feet high and 58 feet in diameter. A marble screen of trellis work surrounds the tomb-chamber where Shah Jehan lies with his Queen.

Shah Jehan was deposed by his son, Aurangzeb, the last of the Great Moguls. Aurangzeb set himself firmly against Akbar's policy of uniting Moslems and Hindus, and broke from the artistic traditions of Shah Jehan, by reverting to the strict Sunni rule which enforced the religious law forbidding sculpture and portrait painting. Architecture of beauty was produced under the influence of the strict Sunni tradition, including the tomb of Sher Shah, a central octagon, surrounded by arcaded

corridors, with a great lotus-crowned dome above, not unlike the plan of a Hindu temple, but displaying a finer sense of formal beauty.

More serious even from the standpoint of religious art were the political consequences of Aurangzeb's policy. To his Moslem co-religionists Aurangzeb was devout. He ate no animal food ; he drank only water ; he knew the Koran by heart, and copied it twice. Yet Aurangzeb's asceticism did not make for general popularity. In 1669, he commenced his persecution of Hindus, and the temples and schools of the infidels were destroyed. In the Hindu insurrection which followed thousands were slain. Still, money in plenty flowed from the Imperial court. It has been estimated that 300,000 people followed the Emperor in his travels. Nevertheless, the bigotry of Aurangzeb made the fall of the Mogul Empire certain and, doubtless, he saw the dangers ahead as clearly as any man. When his long rule ended in 1707, in the eighty-ninth year of his life, his death-bed order was :

“Carry this creature of dust to the nearest burial place and lay him in the dust with no useless coffin.”

With Aurangzeb ended an art movement with a continuous history of over 1,000 years, which included such triumphs of human ingenuity and taste as the Mosque of Cordova, the Mosque of Sultan Hassan in Cairo, and the Moti Masjid at Agra. In the eighteenth century the fourth Sikh Guru, Ram Das, founded Amritsar and built the Pool of Immortality, with its Golden Temple, which became the centre of the Sikh religion. But the tradition of Moslem art patronage had been broken, and the English Raj which followed has not yet found a right employment for the heritage of Hindu craft which comes naturally to those who control the Ganges valley. The Indian Museum at South Kensington (too little known) is rich in interest, but might well be supplemented by an adequate collection of casts and models representing the masterpieces of Buddhist, Hindu and Moslem art, that those who have responsibility for the welfare of India may know the full worth of India's contribution to religious art and so learn Britain's full debt to her Aryan brothers.

MOSLEMS IN SPAIN AND SICILY

Lastly, the Moslem kingdom in Spain. Tarik, the Moor, led an army through Spain early in the eighth century (A.D. 711) and reached the Loire valley. The old Roman and Gothic population were not destroyed, but the invaders brought methods of agriculture and irrigation, which gave a new prosperity to the central plains of Spain. Taking the place of the Visigothic feudal lords, the Arab or Moorish chiefs in Spain formed a new nobility, Islam offering a temporary bond alike to Spaniards, Carthaginians, Romans, Celts and Goths. This was the origin of the blend of classic and oriental influences in Spanish architecture between A.D. 800 and 1500. The Visigothic House of God is represented by the Church of San Juan Bautista, at Banos de Cerrato,

though the present church seems to have been rebuilt after A.D. 1000. The little basilica has an apse at the east end and two apses opening from the arms of the transept, one of which served as a baptistery. There was a porch at the west end, with a wooden roof supported by Roman columns. Whereas the Visigoths and the Spaniards, who did not submit to the Moslems, favoured the rounded Roman arch, the Moorish architects in Spain developed the horseshoe arch, which is seen at its best in Cordova Cathedral.

Cordova fell to the Moors in 711, and the conquerors allowed the Christians to keep the cathedral of St. Vincent until A.D. 747, when they obliged them to give up half the building to the Moslems. In 784, the Moslems purchased the remainder, and Abd al Rahman pulled down the cathedral and laid the foundations of the famous congregational mosque, which was completed by his successors. In the year 793 one-fifth of the booty taken in war was set aside for the building fund of the Cordova mosque. Enlarged and embellished in the ninth and tenth centuries, it was excelled by no church in the Moslem world. The beauties of the horseshoe arch can be studied in the great columnar hall, 428 feet by 378, with its nineteen aisles, formed by horseshoe arches rising from columns, many of which were taken from Roman temples or Visigothic churches. The *minbar* in the eastern aisle was of unequalled beauty, while the *mihrab* stood in an octagonal chapel covered by a monolith marble cupola of shell design. The rulers of Cordova were bent upon eclipsing the glories of the Mosque of Walid at Damascus, and they did not fail. When Cordova was recaptured by the Spanish kingdom of Castile in 1236 the mosque became a Christian cathedral.

No feature is more characteristic of Arab architecture than the arch. There is no effort to vie with the Roman architect in the size and strength of the arch, though there were scores of Roman aqueducts, triumphal arches and public buildings in Spain, had the Arab builders desired to copy them. Instead, the arches are light and fantastic as the surf of an inland sea. "Light and perishable as things of foam, answering, as foam answers, to every gust of passion." Brick and plaster were the materials in general use and were chiefly responsible for the surface decoration favoured by the Arab architects, but no material was too rare or too valuable for use upon occasion. The Court at Cordova was luxury-loving, but any tendency towards sensuous display was checked by the taste and knowledge developed at the universities of Cordova and Toledo. Simplicity of design, restraint in decoration and a fine sense of proportion characterise the best Moslem religious art in Spain.

A volume of reading matter and scores of illustrations would scarcely do justice to the thousand years of effort covered by this short chapter upon the Moslem House of God. Students are referred to such a book as Signor G. T. Rivoira's *Moslem Architecture* and the writings of Mr. E. B. Havell upon Moslem architecture in India. In these pages it must suffice to suggest the historical movements which brought the art into being and determined its general character, remembering

always that, apart from the actual achievement of the Moslem conquerors in religious art, were the indirect consequences upon the Christian, Buddhist and Hindu peoples north and east of the lands which submitted to Moslem rule. An ever-present fear of Moslem conquest, from Asia Minor on the one hand or Spain on the other, was no small factor in keeping Christendom in being and ensuring the control of the art fund in Western Europe to the Popes, bishops and abbots who created Gothic art. Without the Moslem threat, national architecture and sculpture would have arisen in Western Europe but not the art of Christendom to which we now return.

CHAPTER X

ROMANESQUE ARCHITECTURE IN ITALY, FRANCE AND GERMANY

Every great art has a final unity, but this unity is not of a piece, obeying a single law. The apparent uniformity masks a thousand currents and counter-currents. Before a church lives as art it must give the simple satisfactions which arise from an impression of height, breadth, mass, colour, light and shade, and also embody a vast complexity of ideas and emotions. A synthesis must be made so that the building will not only shelter a great congregation and be fitted for an ages-long ritual, but will be a visible embodiment of the inner world of ideas, in which, alone, a satisfying art can arise. This inner world of ideas does not belong to the architect alone ; it is what he shares with his countrymen at large. In respect of it the architect obeys the ghostly promptings of the citizens of a town, the men and women of a city-state, or the people of a nation. Without realising its own collective character, this ghostly body of actual and potential critics proffers suggestions and even commands, which the architect avoids at his peril. Even if he rejects its promptings, he must listen.

In approaching the master synthesis of religious architecture—a Gothic cathedral—art efforts of many types have been passed in review. The Greek shrine served for men who found God in the idea of man made perfect, but not for those who believed that their best hopes lay beyond man, and, indeed, beyond the range of the senses. Eastern mosques, supreme in their graceful beauty, witnessed to the wealth their builders were able to grind from subject races, while they recalled the binding force of Islam in alliance with relentless autocracy. The Buddhist temples of India, Ceylon and Burma, allied as they were with intense conviction, contributed other elements to religious architecture. The structural experiments of the Armenian vault and dome builders may also be recalled. But still the House of God was wanting which would suggest and amplify the manifold associations and emotions which the people of Northern Europe sought in a place of Christian worship and, at the same time, afford that æsthetic delight which, like religious emotion itself, adds vigour to the soul by lifting man to a plane which is above self.

The fusion of structural, æsthetic, emotional and associational elements required in the ideal Christian church affected every part. At times an innovation was due to structural needs ; at others, to meet an associational requirement. When St. Ambrose of Milan, in the fourth century, built some early cruciform churches, the cross-like shape served structural and æsthetic ends, but it was also symbolical. Later,

builders moved the bell-tower from the side to the centre of the church and so increased the structural importance of the transepts, but the symbolical significance remained.

And what was true of the whole was true of the parts. The porch was a means of entrance, but it also had its symbolic significance in an age which revelled in symbolism. With the nave, the choir and the sanctuary, it recalled respectively the penitential, the Christian, the Saintly and the Heavenly life ; the porch saying to the churchyard, the nave to the porch, the chancel to the nave, and the sanctuary to all—"Stand further off, for I am holier than thou !" in the beautiful phrase of Fuller. The stone screen, which separated the nave from the choir, was "the portal of glory," by virtue of the cross above it. The apse was the emblem of the head of Christ ; the halo of chapels at the east end recalled the aureole about the dying Saviour's head, as the transepts recalled the outstretched arms and the choir-transepts the scroll on the Cross—"This is the King of the Jews." The double-lighted windows symbolised the two lights of the law and the gospel, the threefold nave being regarded as an emblem of the Trinity. Mr. Edward Hutton has even suggested that one purpose of the triforium in a Romanesque or Gothic church—he says the "real purpose"—was to house the invisible witnesses of the central mystery of the Catholic faith. These invisible witnesses are actually pictured in mosaic in the nave of Sant. Apollinare Nuovo at Ravenna, occupying the place above the columns and under the clerestory where the triforium of a Romanesque and Gothic church was later to arise. If Mr. Hutton's suggestion is tenable, it was not only in the presence of the living believer that the Mass was celebrated, but "in the midst of the chivalry of Heaven, a multitude that no man can number."

Lastly, the whole church was "a tree of life planted in Paradise ; sending its roots deep down into the crypt ; rising with stems in pillar and shaft ; branching out into boughs over the vaulting, blossoming in diaper and mural flora ; breaking out into foliage, flower and fruit on corbel, capital and boss," while, above, the towers or spires raised themselves skywards, soaring

" Like hearts of hapless men who dare
To sue for gifts the gods refuse to allot ;
Who climb for ever toward they know not where,
Baffled for ever by they know not what."

This is poetry, not historical fact ; it must only be used as the key to a mystery, of value because of the treasure of understanding which it reveals. It may be that only a little of this poetic symbolism can belong to those who live in the twentieth century. But to some people, and at some time, a Gothic cathedral has given rise to all these thoughts and emotions, and a Gothic church cannot be fully understood unless they are borne in mind.

So much by way of prelude to the Romanesque church, which was the forerunner of the House of God of the Gothic age, in which structural, ritualistic and symbolic unity was secured after a thousand years of

experiment. The Romanesque style may be defined as the architecture in vogue between the decline of early Christian art and the rise of Gothic. It was Roman in origin, but included features drawn from Byzantium, Sicily, Moslem Spain and, it may be, from Armenia and Mesopotamia. When fully developed, the Romanesque church was characterised by a cruciform shape, formed by transepts, on either side of the choir, and the apse, the unit of design being the square of the crossing. This square was repeated three times in the nave, and once in the choir and in each transept. The cross-like form was occasionally found in an early-Christian basilica, but, in the Romanesque church, it was the key to the design, and was accompanied by the extension of the eastern apse into a chancel and the development of the transepts. With the coming of a chancel went a tendency to exclude the people from the " holy of holies " about the high altar. This had been foreshadowed by the fourth canon of the Second Council of Tours in A.D. 567, which forbade layfolk to stand among the clergy at vigils or at mass, and reserved all the church on the altar side of the screen to the clergy engaged in the service, the sanctuary being only open to the laity during communion. The purpose of the transepts in ritual seems to have been the provision of extra space for the marshalling of communicants. Later, the transepts became a structural necessity, and took the strain of the great arches east and west of the crossing, particularly when a central tower was added to the Romanesque church. This central tower was originally the detached bell-tower of the basilica, which now came to be an integral part of the architectural scheme. In the Romanesque nave the arches were of bigger span, and piers replaced the classical columns in order that the greater mass of a pier might bear the weight of the roof more easily. When the vault was of stone this was the more necessary. The arches above the piers were often recessed in two or three orders, the piers being arranged accordingly. In place of the flat wall of a basilica, the triforium was developed, becoming an open gallery in a Romanesque church, with an arcade of small arches overlooking the central nave. Virgins and married women, when they had no place in the aisles of the nave, occupied the triforium galleries, which were reached by a stairway and ambulatory in the facade. At the same time, the window-space in the clerestory above the triforium was greatly enlarged, especially in northern Romanesque churches where light was desirable.

During the evolution of Romanesque, the narthex of the early Christian basilica tended to be transformed into three great western doors, cut in the thickness of the western wall, while the square, open colonnade tended to be moved from the front to the side of the church, where it became the monastic cloister. The increasing frequency of child baptism did away with the probationer class in the Christian community, and so with the necessity for a narthex, though occasionally, as at Cluny and Vezelay, a narthex was included in a Romanesque church, possibly for marshalling crowds of pilgrims. The typical Italian Romanesque cloister was a square court with a well in the centre, the court being surrounded by a colonnade. The columns were generally in

couples and rested on a low wall, supporting a roof on a row of arches. The columns had every variety of form, as in St. John Lateran at Rome, where porphyry, serpentine and gold enamel were inlaid in the marble. In the charming cloisters of the Abbey at Monreale, dating from 1174, there are traces of Saracenic and Byzantine influence, due to the Norman princes who had established themselves in Southern Italy by this time.

ITALIAN ROMANESQUE

To understand the historical factors which contributed to the Romanesque House of God, reference must be made to circumstances in Italy after the fall of the Roman Empire and the apparent break with the Roman building tradition. Romanesque means Roman. Last of the German invaders were the Lombards, who entered Northern Italy about A.D. 550. Earlier conquerors of Italy had been assimilated by Roman civilisation or had departed without leaving any deep impression upon the peninsula. Such a leader as Athaulf, the successor of Alaric, seeing the folly of destroying the achievements of Rome, said :

“ When I was young and eager in mind and body I at first eagerly desired to blot out the Roman name, and make all that was Roman the kingdom of the Goths alone. But, taught by long experience of the savagery of the Goths, and fearful of depriving the state of those laws by which a state alone existed, I chose to make it my glory to restore and exalt the Roman name through the vigour and strength of the Goths, so that posterity might know me as the renewer of Rome, since Fate would not allow me to be Rome’s remover.”

Theodoric, too, was a patron of Roman art ; his sons were taught Virgil and the elements of Roman law. The Lombard, however, refused to be tamed. He kept at once “ his savagery and his ground.” In A.D. 553, when Narses drove the Ostrogoths from the valley of the Po, the Lombards were living in Pannonia on the Middle Danube. They advanced into Italy in 567. Pavia was taken in 574, and became the Lombard capital. Coming with their wives and children, the Lombards sought suitable settlement places. As each town was taken, troops were left behind as a military colony. Henceforward, Lombardy was inhabited by two peoples, acknowledging two systems of social custom. The Lombards, however, displayed a real capacity for government, and a sense of the need for compromise. They accepted Catholicism in place of Arianism ; they intermarried freely with the Roman population. In Lombardy, unlike France, Germany and Britain, those who had known Roman rule lived side by side with those who had not. For this reason the Lombards tended to be patrons of Italian, rather than Byzantine, art. In Lombardy, it was possible to save a measure of the Roman building tradition, and here the Romanesque style developed, the word indicating a tendency to follow Roman models, and including the architecture of post-Roman times, before the Norman and Gothic styles

were matured. Like Byzantine architecture, Romanesque developed under the influence of Christian worship and the requirements of Christian ritual. But whereas Byzantine architecture was Eastern, Romanesque was Western.

The credit for preserving the Roman building tradition has been attributed by certain scholars to the guild known as the Comacines. When Alboin the Lombard overran Venetia in A.D. 569, many Romans took refuge on Comacina, an island in Lake Como. The derivation is convenient rather than certain. Accepting it, among the refugees upon Comacina were a party of Roman builders and sculptors. Under a Roman governor, Francione, the island held out for 20 years, when it was taken by Autharis, who seized the treasure stored there by Narses. Having no building tradition of their own the Lombard conquerors were willing enough to employ the Comacines, and for a long time this Roman influence tended to stop the spread of the Byzantine building craft in Western Europe, and favoured the building of Latin basilicas rather than the domed churches of Byzantium. An edict of the Lombard King Rotharis, dated A.D. 643, recognised the Comacines as a guild with legally-defined privileges. Master builders were not forced to work as serfs, as an edict of King Luitprand, dated 713, shows. The decree also fixed the price of various types of buildings. In the following centuries, bulls and diplomas from Popes and Kings confirmed these privileges and absolved members of the building-guild from local taxation and gave them freedom to travel. Painters, sculptors, carpenters who designed the scaffolding, metal workers and wood carvers, were members of the corporation, which, in course of time, included a *schola* for novices, a *laborarium* for the *operatori*, and an *opera, or fabbrica*, for the masters. Each lodge had a secretary and treasurer, and arranged for the initiation of novices and the discussion of craft affairs. *Fratelli*, meaning brethren, *magister*, meaning the architect or master of administration, *murarius*, any builder, and *operarius*, subordinate mason, are grades constantly mentioned in connection with the mediæval building guilds. A lodge of freemasons might work upon a cathedral or put up churches or state buildings for a ruler, decade after decade. At Modena, a family of freemasons worked for 200 years upon the cathedral, son succeeding father, and nephew uncle. The sons and nephews of *Magistri* appear to have had the privilege of membership of a building-guild by heritage, and were spared a long novitiate. One contract tells that "the Magister and his heirs *in perpetuo* shall work at the said church of Modena, and either the said Master or any other Master, his descendant, shall receive each day eight imperials in the days of May, June, July and August, but six imperials only in those of the other months, for their recompense and their work."

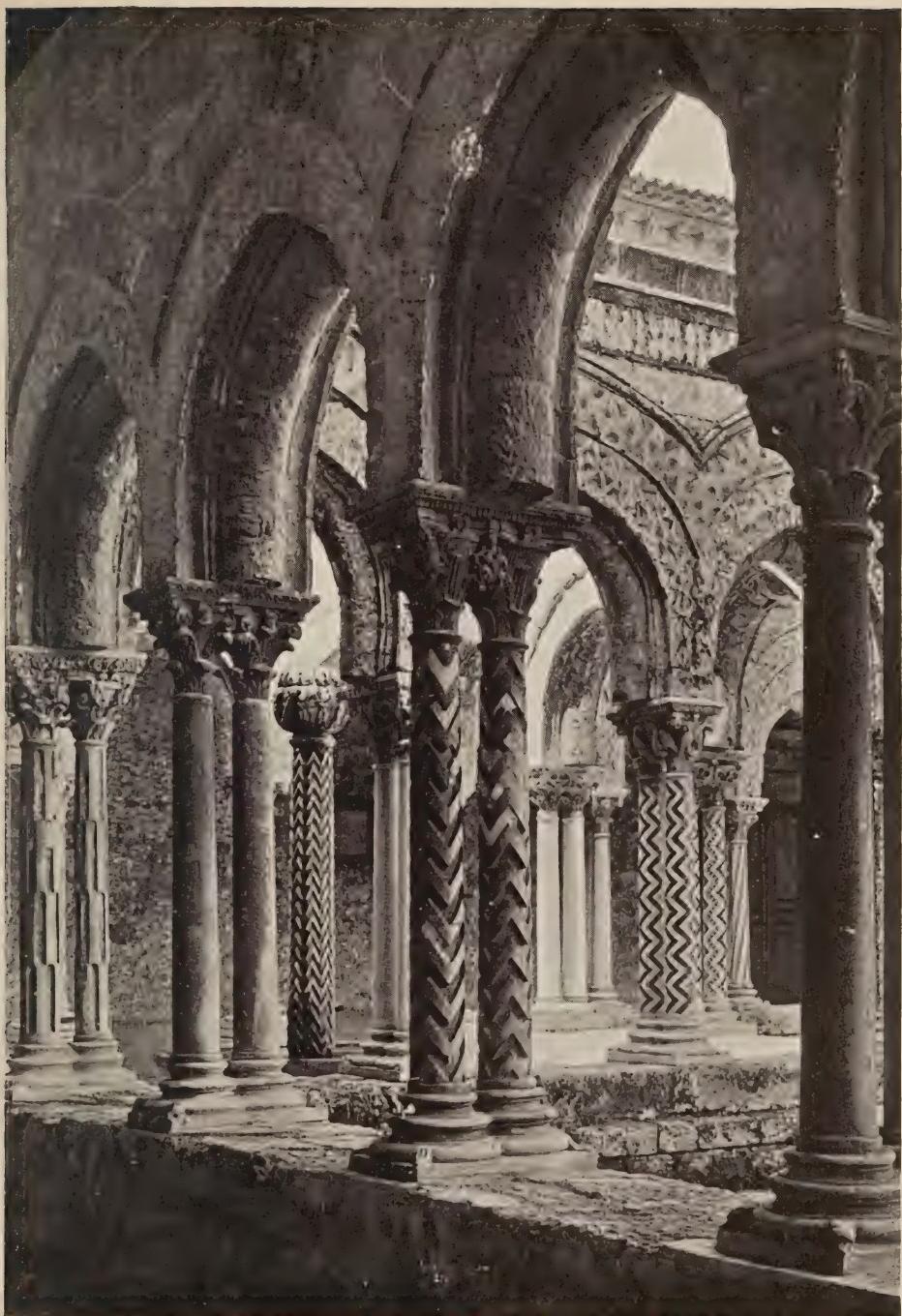
Since the publication of Leader Scott's fascinating record of the *Magistri Comacini*, there has been a tendency to exaggerate the influence of the Lombard builders. In truth, the troubled personal history of the Langobard kings did not encourage a vigorous art, as we may judge from the story of Theodolinda, through whom the Lombards were won from Arianism to Catholicism. After Alboin was poisoned by his

wife Rosamund in A.D. 575. King Autharis succeeded to the Langobard throne. He was an Arian, but wedded Theodolinda, a protégée of Pope Gregory the Great. In 590, Autharis was poisoned in his turn, and Theodolinda wedded herself to Agilulf, Duke of Turin. A tale of the courtship is well known. When the queen offered Agilulf a cup of wine, he kissed her hand, but she said with a blush, "He who has a right to the mouth, need not kiss the hand." Theodolinda and Agilulf founded the cathedral at Monza, near Milan, in 590, where early examples of Lombard art may still be seen. Gundeberg, a daughter of Theodolinda, married Rotharis and built San Giovanni in Borgo at Pavia, a church which was unfortunately destroyed in 1811.

This early Lombard art reached its climax about A.D. 725, in the time of King Luitprand, whose services to religious art are suggested by the fact that he brought the body of St. Augustine of Hippo to Pavia.

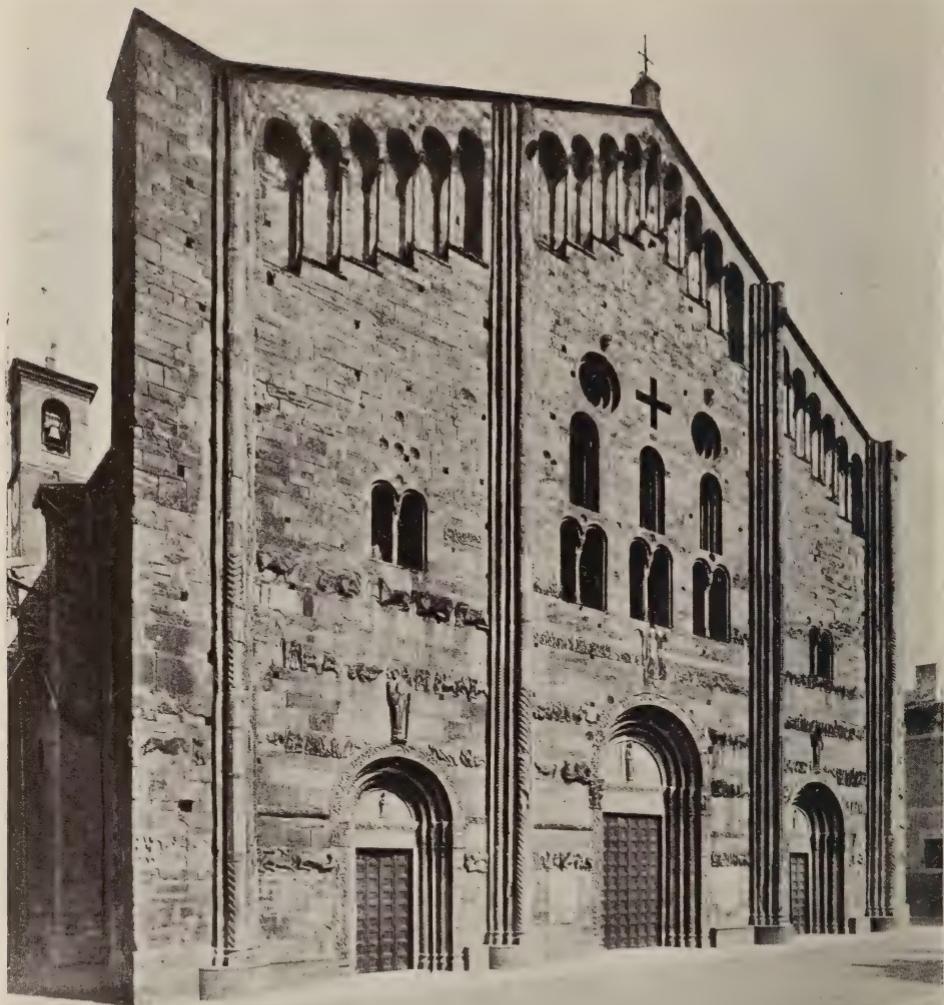
There has been so much rebuilding that it is impossible to point to any church as the undoubted work of builders at the time when the Lombard kings directed the art fund in Northern Italy. The architectural characteristics in the age must be gauged from numerous buildings of very varied dates. Among the characteristics were the rows of colonettes decorating the exteriors, which developed into a familiar feature of later Italian Romanesque. The overhanging cornice was another pleasant characteristic, as was the square bell-tower. Early Lombard decoration can best be studied at San Michele, Pavia. Much of the present church dates from the eleventh century, but the strips of ancient sandstone reliefs let into the facade come from the church which was in existence in the time of Luitprand. The church itself is cruciform, and is divided into a nave and aisles by pillars spanned by round arches. The short, raised choir, with its crypt, ends in an apse, while the church is vaulted with square bays. The symbolic sculpture is fully described by Leader Scott. A huntsman and his dogs serve as emblems of the Christian driving out heresies. A fisherman recalls the priesthood fishing for souls in the ocean of sin. The four beasts are emblems of the evangelists, the lion, the calf, the eagle and the man of Revelations iv., 7. The vine is Christ; the peacock with an olive leaf is the Church bringing peace; the six-breasted woman, veiled, carrying two pine-cones and wearing a long robe, is the world-mother, Cybele. The dragon ridden by a child is a symbol of Christ overcoming sin; the two sphinxes represent the knowledge of good and evil. The hippocriff, a combination of horse and eagle, represents the redemption of man. Of deep interest in itself, this symbolic decoration gains even richer significance when compared with the naturalistic sculpture of France in later Gothic times, when the entrance to a House of God became a library of Christian fact and theory. In the interval the symbolic and non-representational methods of the early Christians had given place to the human representation which the Greeks had exploited on their temples.

The leaders of the church were never in doubt as to the value of this symbolic art. Centuries earlier, Dionysius the Areopagite had said: "It is necessary to teach the mind regarding the spiritual hierarchies



MONREALE ABBEY: THE CLOISTERS

(see page 146)



SAN MICHELE, PAVIA

(see page 148)

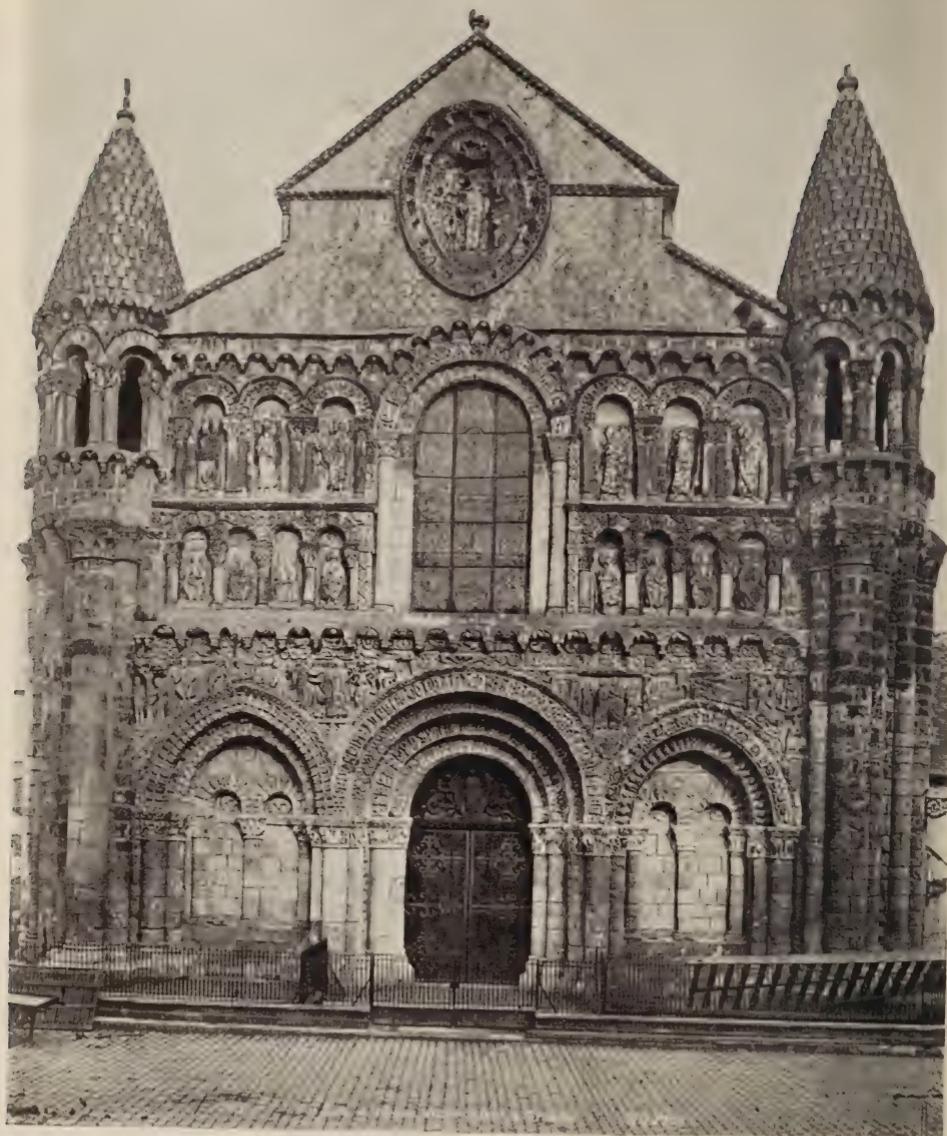
Alinari



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SAN MINIATO, FLORENCE

(see page 151)



NOTRE DAME LA GRANDE, POITIERS

(see page 158)

by means of material figures and formal compositions, so that by comparing the most sacred forms in our minds we may raise before us the spiritual and unpictured beings and similitudes on high." Leader Scott, in *The Cathedral Builders*, also recalls a letter written by St. Nilus (A.D. 985). Writing to Olimpiodorus, St. Nilus said :

" You ask me if I think it an honourable thing that you erect temples to the memory of martyrs as well as to that of the Redeemer. . . . You ask also whether it would be wise to decorate the walls on the right and left with animal figures, so that we may see hares and goats and every kind of beast flying away, while men and dogs follow them. Whether it would be well to represent fish and fishermen throwing the line or not ; whether on the stone shall be well-carved images of all kinds of animals, and ornamental friezes and representations of birds, beasts and serpents of divers generations ? "

The reply of St. Nilus was " Yes."

Desiderius (756) was the last of the Lombard kings. He quarrelled with Pope Adrian, who persuaded Charles the Great to dethrone Desiderius. The battle of Pavia ended 200 years of Langobardic rule. On Christmas Day, A.D. 800, Charles was crowned in the basilica of St. Peter at Rome, and hailed by Pope Leo III. as Augustus. The Frankish king and the Roman Pope formed an alliance which made Charles supreme in Central and Western Europe, with the exception of Spain. A time of strife followed the death of Charles until Otto the Great consolidated the German Empire and, in 962, was crowned Emperor at Rome, where Otto III. made his capital.

The Roman Empire was now divided into two parts, with different social customs and racial characteristics. In the East, Oriental influences were intermixed with Greek thought and craft, while, in the West, the Roman building tradition was dominant, though changing to meet the needs of the northern invaders, Franks, Germans and Normans. A result of the political system established by the Carlovingian kings was largely to increase the art fund available for religious purposes in Western Christendom, as may be judged from the Saxon Capitulary issued in A.D. 782, the time of Charles the Great. Here are four clauses :

" If any man despise the Lenten fast for contempt of Christianity, let him die the death.

" If any man among the Saxons, being not yet baptised, shall hide himself and refuse to come to baptism, let him die the death.

" Let the men of every hundred give to their church a house, two hides of land, a male and female slave.

" Let all men, whether nobles, free, or serfs, give to the churches and the priests the tenth part of their substance and labour."

By A.D. 800, after three or more centuries of chaos, there was a possibility of political security in Western Christendom. At the same time, the presence of an ample art fund and an exceptional supply of gifted craftsmen gave promise that Romanesque architecture and art might produce the unity of structure, ritualistic requirements and symbolic

significance which Christendom had been seeking from the moment a Christian House of God became desirable. In connection with the development of the Romanesque church between the time of Charles the Great and the creation of Gothic architecture in the twelfth century, Italy was specially favoured in the supply of skilled craftsmen. Not only the "Comacine" builders of Lombardy, but Byzantine and even Saracen builders and decorators offered their services. The beauty of the Romanesque churches in Italy was largely due to the guildsmen trained in this eclectic school, who were responsible for a wonderful series of churches which arose in all parts of Italy at the time the Norman style was passing into Gothic north of the Alps.

Nowhere can Byzantine influence be seen operating more directly than in San Marco, Venice. The church was the chapel of the Doges and, perhaps, is more rightly regarded as a religious museum than a House of God of formal architectural beauty. For this reason San Marco may be regarded as dating from 829, when the Egyptian Moslems determined to pull down the church of St. Mark at Alexandria, and so made it possible for the chapel of the Doges at Venice to secure a relic which assured it a foremost place among the churches of Christendom. The reception of St. Mark's body in Venice is pictured in a mosaic above one of the doors in the facade, which also shows the church as it was in the middle ages. Since the Arab conquest of Egypt in 640, the relics of St. Mark had been the object of continuous insults, and, in A.D. 829, the Kaliph determined to despoil the church in which the saint was buried. Two Venetian traders, Rustico of Torcello and Buono of Malamocco, were advised of this by the priest Theodore, the custodian of the sanctuary, and we may believe that it was to satisfy no personal ambition that they determined to carry the body of the saint to their ship. To avoid unnecessary risk, they resorted to a trick. A picture in the Presbytery of San Marco is inscribed : *Marcum furantur : Kanzir hi vociferantur* (They steal the body of Mark, crying as they come, "pork, pork").

Pork, of course, was an abomination to pious Moslems, and in the picture the customs officials of Alexandria are seen turning away in disgust. In the early thirteenth century mosaic two churchmen are carrying the sacred body upon a bier into the church, in the presence of a princely throng, supposed to have gathered in Venice in honour of the Evangelist, who, thenceforward, replaced St. Theodore as the patron saint of the Venetian republic. Spurred by the success of Rustico and Buono, every wealthy merchant-voyager felt under an obligation to search for treasure for the civic church. Now it might be a slab of alabaster, or a column of jasper, serpentine, or porphyry ; now a pillar from the Temple at Jerusalem, or, treasure of treasures, the Pala d'Oro itself. The church itself was planned by the Doge Participazio, who was in office when the body of St. Mark was received, but a fire in A.D. 976 necessitated a partial re-building of Participazio's basilica, and the present church of St. Mark seems to date from A.D. 1063. The plan chosen was that of the church of the Holy Apostles at Constantinople, which had the form of a Greek cross, with a dome above the crossing

and four other domes over the nave, transepts and choir. San Marco was finally completed with a Gothic facade.

In Apulia and Sicily, Byzantine craft influences were mingled with Saracen, while the art fund was directed by Norman dukes, who had established themselves in Southern Italy, particularly Robert and Roger Guiscard. Before the Norman conquest, Apulia, with Bari as its capital, belonged to the Byzantine Empire, which also ruled in Sicily until A.D. 827, when the island was taken by the Saracens. In 1090, the Norman dukes in Apulia defeated the Saracens, and for 200 years were the patrons of art in Southern Italy and Sicily. The churches built under their direction have characteristics derived from Byzantine and Saracenic art, as well as those due to the Romanesque traditions of the North, the churches being also rich in furniture decorated with inlays of glass mosaic. In the twelfth century the surest craftsmen were working in the south, and it was to Apulia that Rome, Pisa and other North Italian towns sent for the builders and decorators, who decked their cities in the new White Robe of Churches, which replaced the Romanesque churches of the Lombard building-guilds. The inlays of coloured stone and glass mosaic on their pulpits and pavements, or on the columns supporting the cloisters, were as beautiful as anything in Europe during the twelfth century, for example, the cloisters of the Abbey of Monreale. No less memorable is the mosaic work, such as the great mosaic head of Christ which fills the semi-dome of the apse of Monreale, and the doors, cast in solid bronze, such as those at Troja, Trani and Ravello. The decoration of ciboria, ambones, pulpits, choir-enclosures and baldacchinos was largely Byzantine, though the Cosma family, which seems to have had its headquarters in Rome, executed some remarkable mosaic pavements and other decorative work between 1150 and 1300. By this time the interior wall paintings in the apse and elsewhere had lost the schematic character which was essentially Byzantine, and were developing the contact with naturalism which was Italy's contribution to mosaic and fresco painting.

The operation of these factors may be judged in the basilica of San Miniato, a church on the outskirts of Florence, which dates from 1013, and is one of the oldest in Tuscany. In San Miniato, there is the raised chancel of the early Christian basilica, occupying the whole space beneath the chancel with charming effect. The Roman custom of covering the walls with a thin veneer of marble has also been followed, doubtless owing to Byzantine influence. The roof of the nave is supported by marble columns, taken from earlier buildings, as in San Lorenzo or San Clemente at Rome, but, in the case of San Miniato, piers have also been introduced and are connected by great transverse arches, which span the nave, a step in the direction of vaulting, though the roof of San Miniato is of wood. Of no less interest in the development of Italian Romanesque is the basilica of San Ambrogio, at Milan, which has already been mentioned in connection with that memorable church builder of the fifth century, St. Ambrose. The choir of San Ambrogio was rebuilt about A.D. 850, but the nave dates from the eleventh century. Unlike San Miniato, the nave of San Ambrogio is

vaulted and has a large, open triforium gallery, and massive piers have replaced the classical columns, each pier being connected with its fellow on the other side of the wide nave by a great transverse arch. The sense of space and the impression of simplicity and restful power left by these churches are happily characteristic of Italian Romanesque at its best.

Interesting as were the developments in church decoration in Romanesque times, they are of minor importance. What really matters is structure, and it is structure which must be studied if the contribution of the Romanesque builders to the final unity, Gothic art, is to be understood. Moreover, these problems of structure are not to be studied fully in Italy. For many centuries Italian builders were hampered by a lack of the excellent concrete which the Roman builders had used in imperial times. Whereas the Romans had opposed the resistance of massive walls to the thrust of their great vaults and domes, the Lombard builders had to work with light material which could be carried up a ladder on a man's back. Instead of big stones and first-rate mortar, the Lombard builders were forced to work with rubble and poor mortar. Unable to construct vaults of concrete, as the Romans had done, the early Italian builders constructed semi-circular barrel-vaults, an art in which they may have learnt something from Armenian example. The evidence for this mingling of Eastern and Western elements in Romanesque architecture is not yet fully accepted by scholars, and must not obscure the fact that barrel-vaults made of concrete were used by the builders of classical Rome. In any case, the Romanesque builders developed the science of vaulting. The name "barrel-vault" arose from the fact that the vault resembled the inner side of a barrel, cut in half, lengthways. Other Romanesque churches were built with semi-circular vaults in four sections, made up of two barrel-vaults which crossed one another. The weakness of these umbrella-like vaults is at the points where the sections meet, and here the Romanesque builders strengthened them with ribs of stone. The Romanesque builders were also interested in the problems arising from the necessity for making the semi-circular ribs cover spaces of varying size and at different heights from the floor. Arches of different curvature were necessary to vault an oblong space to those required for a square. When these problems of ribbed vaulting were solved the Romanesque builders had prepared the way for the triumphs of Gothic.

The Lombard guildsmen and their Byzantine and Italian associates made the initial experiments and inventions in Romanesque, but the full reward of their enterprise was denied them. For several centuries Italian masons, carvers and mosaic workers were acknowledged to be the best in Europe, and were freely employed in all parts of Christendom. Benefiting by the ampler art fund established under the Carlovingian kings and profiting by the patronage of the Franco-German rulers, Italian builders travelled freely in the lands to the north of the Alps, bearing with them their knowledge of the Romanesque style with its heavy walls, its bulky piers and its barrel-vaulting. Through the instruction Italian guildsmen gave to German and French builders knowledge of Romanesque spread by way of the Rhine valley to Nor-

mandy, where Romanesque was merged into the style Englishmen know as Norman. Instructed by Charles the Great, Italian masons, under Master Odo of Metz, built a church at Aix-la-Chapelle (Aachen) which was at once a mausoleum for the conqueror, a church for worship, and a crowning place for the dynasty. The central octagon was covered by a dome and a sixteen-sided aisle surrounded this octagonal centre, the aisle itself being surmounted by a vaulted gallery. The plan of Charles the Great's church is manifestly inspired by that of San Vitale, Ravenna. The altar was placed under the dome, though the church had a small apse. Classical columns and rare marbles were brought from Rome and Ravenna, and the dome was decorated with a mosaic of Christ and the twenty-four elders. Aix-la-Chapelle being a Northern town, the roof of the cathedral was more sloping than the flat roof of the Lombard buildings in Italy, so that, even at this early date, the style had affinities with the later Gothic architecture of France, with its pointed arch, steep gable and large windows. After the death of Charles the Great, Italy, France and Germany faced two dark centuries of stress and reshaping. The Germanic incursions had been checked, but there were invasions by Magyars, Slavs and Saracens, and the sea-raids by Danes and Norsemen continued until about A.D. 1000. Western Europe then entered upon an era of expansion which afforded the building arts an opportunity they had not had since the times of Imperial Rome.

The year A.D. 1000 selects itself on account of the feverish anxiety with which Christendom awaited the end of the Millennium and the expected loosing of Satan. Those who made a will or executed a deed commenced with such a phrase as "Seeing that the end of the world is at hand." Terror was increased by the indefiniteness of the fears. Though the mystic year passed without any untoward happening, it was followed by a devotional impulse of vast extent. Radulf Glaber, who died in 1045, tells that so early as 1003 nearly all bishops' seats, churches, monasteries and even village oratories were being rebuilt by the faithful until "the world seemed to be doffing its old attire and putting on a new white robe of Churches."

THE HILDEBRANDINE CHURCH

Up to A.D. 1000 Christendom had been an agricultural community organised on a basis of feudalism. The typical man of substance, outside a few capital cities, was a franklin or landowner, whose chief desire was to farm his homestead and see his children farm the homestead after him. A body of kinsfolk made up an agricultural village, the grazing land being held in common. In course of time, certain of these agricultural villages on important trading routes became towns and a civilisation developed very different from that enjoyed by the Romanised serfs, the German franklin, the rough feudal lord, the Benedictine abbot or the missionary bishop in the centuries which followed the fall of the Western Roman Empire. Trades and crafts became more clearly

differentiated from each other. Monasticism no longer consisted of the Benedictine Order alone ; new Orders tended to arise, each having its own characteristics. The Benedictine system served during the missionary age, but it proved inadequate when the Catholic monks were required to act as a unifying factor in a sub-continent which included France, Germany, Britain and the greater part of Italy.

This weakness in the monastic system was, in part, righted when the Abbey of Cluny was founded in Burgundy in A.D. 909. The Cluniac Order was free from all control except that of the reigning Pope, but the several houses of the Order were under the close and continual jurisdiction of the Abbot of the parent monastery at Cluny. The chief aim of the Cluniac system was to do away with the autonomy which characterised an abbey under the earlier Benedictine rule. The Cluniac rule combined formal adherence to the strict "regula" of St. Benedict, with full control over daughter communities. Through her priories, the Cluniacs sent architects and builders to all parts of Western Europe.

The abbey church of Cluny, commenced in 1089, marked the culmination of the Romanesque style. Most of it is in ruins to-day, though the cathedral at Autun, a copy on a small scale, remains to recall the main features of the Cluniac design. The church of Cluny had double aisles in the nave, a long choir at the east end, also with aisles, and a chevet in place of the single apse, features which were developed in most of the later French cathedrals. The church at Cluny also had a narthex with three doors leading into the aisles and nave, a feature well suited for a church which made a special appeal to pilgrims. Meeting in the narthex, a band of pilgrims passed through one of the aisle doors, came to the ambulatory circling the altar and its shrine, whence they had a momentary sight of the relics before they passed from the church by the other aisle door.

The Cluniac system gave the Papacy trusty lieutenants, but, to understand the impulse which made Christendom put on the new white robe of Romanesque, Norman and Gothic churches, the ever-extending influence of the Pope at Rome must also be remembered.

Between the time of Charles the Great and the year A.D. 1000, the Papacy suffered many vicissitudes. At times the Pope was little more politically than the nominee of a ring of corrupt Roman nobles. It was the age of the dissolute Theodora and Marozia. With the coming of the Emperor Otto, a new conception of the relation between Church and State arose. The Pope at Rome secured his own position by assisting the Emperor against recalcitrant churchmen in Germany. Dimly realising that Christendom had taken the place of Roman Imperialism, Otto I. had dreams of a Holy Roman Empire which would serve as a unifying force in Western Europe. Aided by Sylvester II. (Gerbert of Aurillac in the Auvergne), who became Pope in A.D. 999, Otto III. built his palace on the Aventine Hill and made Rome the seat of the Empire of his dreams. Pope Sylvester, for his part, sought to make Rome the seat of a spiritual empire which should dominate Christendom and also built a vast palace on the Aventine Hill, secluding his

sacred person from the world, after the manner of a Byzantine emperor, and meeting Otto as an equal.

Pope Sylvester and the Emperor Otto passed away, but for many years Europe was influenced by the dimly-realised ideal of a Universal Empire working hand in hand with a Universal Church. Men held the opinion that God had two vicars on earth, the Emperor who was supreme in temporal things and the Pope whose power was paramount in spiritual matters. With this belief went the dream of a vast European Empire ruled by two powers, to one of which God had delegated the temporal sword, and the other to which He had entrusted the spiritual staff.

It was not to be expected that such evenly-balanced powers as the Empire and the Papacy would long remain in alliance. Directly the Papacy found its privileges infringed by the Emperor's desire to confirm the election of a Pope, a counterclaim was advanced. "I am the source of the imperial dignity," said the Pope. Both Emperor and Pope agreed that the Papacy and the Empire were of divine origin. But was the temporal ruler in the last resort subordinate to the spiritual? That was in dispute.

The matter was of importance. During the two centuries after the reign of Charles the Great, the Church of Rome became increasingly secularised. Lay abbots arose, upon whom were bestowed the beneficium of the King. Monasteries were given as dowries to princesses. Moreover, churchmen were approximating closely to the great feudal lords. Early in the eleventh century the spirituality of churchmen seemed on the point of being lost in the depths of feudalism. Had this tendency persisted, humanly speaking, the spiritual power must have succumbed.

By A.D. 1000 the Catholic church was not only the largest landowner in Western Europe but the chief depository of capital. This tendency developed as the centuries passed. When feudal lords needed money, they mortgaged their land to monasteries. In the Middle Ages between one-eighth and one-quarter of the land was in the hands of the Church. It was plain that the Church could not maintain its spiritual attributes unless a strong central executive and a stern discipline counteracted the tendency to secularisation.

Leo IX. came to the Papal throne in A.D. 1048. He was a cousin of the Emperor Henry III., but he took a strong stand for the clerical rights. He insisted that he should be canonically elected by the Church, and would not agree that his election depended upon the will of the Emperor. Energetic and honest as Leo IX. was, the Church of Rome would have fared badly in the struggle with the Empire had Leo not chanced to call at the Abbey of Cluny on his way to Rome. Here he met a young monk named Hildebrand whom he took to Rome. Hildebrand duly came to man's estate, gained a man's experience, and, years later, Christendom found in him the gifts it required. Hildebrand was preaching the funeral sermon after the death of Pope Alexander in A.D. 1073. Overcome by emotion, he faltered and broke down. Then, on a sudden, the stillness of the crowd was broken by a voice crying:

"Hildebrand for Pope; Hildebrand for Pope; He is the choice of Saint Peter." The College of Cardinals—only created in A.D. 1059—bowed to the popular demand and Hildebrand became Pope Gregory VII.

Pope Gregory VII. was the real creator of the system which was primarily responsible for the new white robe of churches. The son of a carpenter, he was not a man of deep learning or spirituality. Damiani indeed called Gregory "My holy Satan." Far from withdrawing himself from the world, Hildebrand lived in constant intercourse with the secular powers. Fat, short of leg, low in stature and a stammerer, Pope Gregory VII. was not a man who might have been expected to inspire the trust and enthusiasm of a vast community, but he had learnt the elements of clerical politics at Cluny, and his experience at Rome gave him astonishing driving force. The keynote of his policy was to withdraw the priesthood and the monks from the secular and feudal systems. Instead of paying homage to dukes or kings, he instructed bishops and abbots to acknowledge the supremacy of the Pope and the Pope alone.

The first difficulty Gregory faced was due to the large part which the bishops played in the politics of Italo-Germany. The Emperor sought to bind his clerical administrators to his throne by granting to them their insignia of office. Thence arose the Investiture Quarrel, which was not settled until A.D. 1122, when the imperial claim to the right of investiture was abandoned. Henceforward, the only authority exercised by the Emperor depended upon the fiefs held by clerical lords upon similar terms to those held by lay barons.

Having enunciated his demand that the Papacy should rule its servants, the monks and clerics, Gregory VII. raised the great leaders of the Church above the temptations of power, wealth and family affection. In 1073, priests as well as monks were ordered to take the Vow of Chastity. Thenceforward, a childless cleric could not be affected by the feudal desire to "found a house."

Gregory VII.'s last claim on behalf of the Papacy can be summed up in a single sentence from one of his letters.

"Human pride has created the power of Kings; God's mercy has created the power of bishops. The Pope is the maker of Emperors. He is rendered holy by the merits of his predecessor, St. Peter. The Roman Catholic Church has never erred and Holy Scripture proves that it never can err. To resist it is to resist God."

Faced with Gregory's claim that the Pope was sovereign arbiter in all disputes, judge in every succession, "forming, instead of king or emperor, the coping stone on the feudal system," it is not strange that the Emperor Henry IV. determined to defy the Papacy. The astonishing thing is Gregory's complete victory at Canossa in January, 1077. The Emperor found that his subjects would not obey an excommunicated man, and he was forced to throw himself upon the Pope's mercy. On the 21st of January, the Emperor left his wife and courtiers at Reggio and climbed the 15 miles of snow-bound roadway to Canossa, a

mountain fortress in the Apennines. Gregory refused to receive the penitent Emperor. He said :

" Let him surrender his crown and the insignia of royalty into our hands and confess himself unworthy of the name and honour of King."

For three days Henry waited outside the inner gate of the castle, bare-footed and garbed as a penitent. On the fourth day, the Pope received him. Crying, " Holy Father, spare me ! " Henry flung himself at Gregory's feet.

Gregory died in exile in 1085, but the memory of the penance at Canossa did not fade. The authority of the Pope had been established very surely. How surely was proved when Urban II. called Europe to the First Crusade at Clermont. " It is the will of God," cried his hearers in response. Later the Popes were able to divert the crusading zeal of France, Britain and Germany against heretics of all kinds, and, finally, against the political enemies of the Papacy, when the spiritual supremacy of Rome was threatened.

The religious system which found expression in a Romanesque House of God after A.D. 1000 was essentially that of an organised priesthood. The missionary age in Western Europe had passed or was passing. In place of individual enthusiasm, or the efforts of tiny communities of Benedictine monks or secular canons, came the organised efforts of men who constantly renewed their strength by the knowledge that behind any individual effort was the experience of a mighty central institution, the Papacy. The hierarchic spirit differentiated a Romanesque church from an early Christian basilica or the churches built by such pioneers as Martin of Tours, Wilfrid of York, or the Lombard and Franco-German kings. By A.D. 1000 the men of God, whether monks or priests, had secured a recognised place in national and international politics, and a major share in the available art fund was assured to Mother Church.

ROMANESQUE IN FRANCE

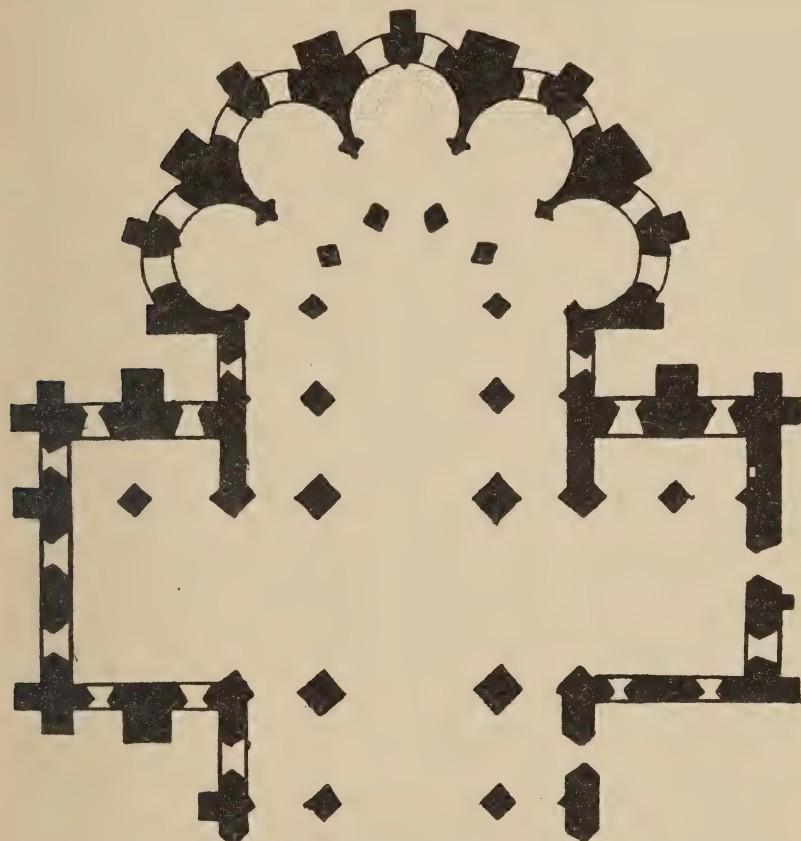
One other factor in the political organisation of Western Christendom calls for mention—the feudal lords. Though of less importance in connection with the Christian art fund, they were not without influence. After the reign of Charles the Great, Western Europe tended to be organised as a series of great fiefs, worked partly by serfs and partly by tenants, under the control of Lords of the Manor. These manorial lords were the liegemen of the Counts who led the militia, administered justice and collected the royal dues. The system gave the people some protection against barbarian raiders and set up local centres of jurisdiction, which, at any rate, were better than no justice at all. This social and economic system culminated in the holders of the great fiefs, who acknowledged fealty to none except the King. By absorbing their weaker neighbours, the great feudal leaders were preparing for the stable

political system on which arose the great kingdoms of Central and Western Europe.

Among the feudal lords were the Counts of Southern France, who ruled at some distance from Paris and for a time escaped the unifying influences arising from the pressure of the French and English kings and, in a lesser degree, from the Dukes of Burgundy. The special characteristics of the Romanesque churches between Poitiers and Toulouse are in a large measure due to the peculiar political and social conditions in these minor principalities. At Poitiers is the church of Notre Dame la Grande, one of several which witnesses to the splendid court of Count William IX. (died 1127), whose followers included such a man as Bertran de Born. Notre Dame du Port, at Clermont Ferrand in Auvergne, is memorable as the place where the Church Council of 1095 was held at which Urban II. instituted the Crusade. Before the doorway of Notre Dame du Port, the cry of "Diex el volt!" was raised in response to the appeal of Peter the Hermit. Before the Black Virgin within, the first Crusaders made their vows. Notre Dame du Port has four apsidal chapels, a feature which gave rise to the chevet. As German Romanesque developed the tower, so French Romanesque developed the eastern chapels until they had an integral place in the Gothic House of God. First there was the rounded apse derived from the Roman *schola*; then altars were added on either side of the high altar, so that the apsidal ending tended to have a three-fold form. Finally, the chapels increased in number, and instead of being separated one from the other were united by an ambulatory, until at Le Mans Cathedral there were thirteen apsidal chapels, east, north and south of the high altar. The chevet never became popular in England, but there is a beautiful example at Westminster Abbey, where French planning was followed. There was a simple example of the chevet at Croxden, a Cistercian abbey in Staffordshire, consisting of five chapels radiating from the sanctuary. The chevet is yet another example of the principle of unity in structure which the church builders of Christendom were seeking.

The Cathedral of St. Pierre, at Angoulême, is another well-known example of French Romanesque. St. Pierre is a Latin cross with four projecting chapels at the east end, but the four bays of the nave and crossing are domed, probably a Roman element which tradition preserved in Aquitaine from classic times. Even more famous among the domed churches of Southern France is St. Front, Périgueux, which appears to be Byzantine rather than Roman in origin, and bears a resemblance to St. Mark's, Venice. The resemblance has been traced to a colony of Venetians and Greeks in the neighbouring manufacturing town of Limorges. Périgueux, however, was a place of importance in Roman times, and the town contains some of the most remarkable Roman remains in France, including the Tower of Vesuna. Christianity came to Périgueux early, legend says, through the intervention of St. Peter himself, who sent St. George and St. Front to the district in the apostolic age. On the journey St. George died, and St. Front made a grave for his companion by the roadside and returned to Rome to tell

the apostle what had happened. St. Peter gave St. Front his own staff and sent him again to Gaul. Coming to the roadside grave Front planted the staff in the ground and the dead arose, St. George, to found the Cathedral at Velay, and St. Front to build his church in Périgueux, which was to become the centre of a great Benedictine community. St. Front was rebuilt, after a fire in A.D. 1120, with five domes, 40 feet



AN ENGLISH CHEVET, CROXDEN ABBEY

in diameter, one over each arm of the square church and the centre one above the crossing. The decoration of these Romanesque churches in Southern France, such as the carving on the Corinthian columns, shows more finished craftsmanship than work of the same date in other parts of France.

The great domed pilgrim church at Le Puy, in the Auvergne, was the home of the miracle-working Black Virgin, which St. Louis bestowed upon the church as a thanksgiving for his release from captivity in Egypt. Legend told that the statue was carved by the prophet Jeremiah, though modern archæologists suggest with greater probability that it

was a statue of the goddess Isis, with her child. During the Reign of Terror, the Black Virgin was dragged from her shrine and burnt in the market place by the revolutionaries. Le Puy cathedral is entered by a great stairway with numerous flights of steps, which continue beyond the great triple porch until the interior is reached.

Beautiful, too, is the church of St. Trophime, at Arles, with its highly decorated porch and its charming cloisters. Trophimus was one of the early founders of the Gallic church. At his prayer, says legend, Christ appeared to consecrate the cemetery of the Aliscans, which was so holy in the eyes of the Faithful that poor folk placed the bodies of their dead in casks and committed them to the river in the hope that they would be salved as they passed the cemetery gates, and so find burial in a place which Christ himself had blessed.

An uncouth but labour-loving people were the Auvergnats, with more of Celtic blood than most Frenchmen, if only because their mountain fastnesses helped them to withstand invaders, whether the legions of Cæsar or the hordes of Goths, Burgundians and Franks. Much of the Auvergne is mountainous, but there are fertile districts on the banks of the Allier where volcanic dust has proved a fertilizer of rare quality. These were the economic factors which explain the flowering of the Romanesque in the Auvergne. The Aquitanian was a pleasure lover, and the sculptured doorways of Poitiers recall his characteristics by their wayward luxuriance of fancy, which seem the richer because of the strong light and shadow cast by the sun of Provence, which also adds significance to the shadowed porch and dark nave within.

Even in Gothic times these churches of Southern France had characteristics which distinguished them sharply from those of the north, where the monarchy had already established its power. The Roman tradition persisted in the south, and the church builders preferred wide naves and large floor spaces. Here, too, the influence of the preaching orders, the Dominicans and Franciscans, was strong, and there was an urgent need to accommodate large congregations. Many of these southern churches were built during the crusade waged by the Dominicans and Franciscans against the Albigenses in the thirteenth century. Indeed, it was at Toulouse, during the struggle to extirpate the heretics in the time of Count Raymond, that the Dominican Order came into being. In 1208 it chanced that Peter of Castelnau, a Cistercian monk, was murdered by Raymond's retainers, thereby precipitating the conflict with Simon de Montfort, which ended in the conquest of Languedoc. In 1213, just before the battle of Muret, in which Simon defeated Count Raymond, Dominic, who had come over from Spain, founded the Order of the Friars Preachers. The zeal which enabled Dominic to bring the Friars Preachers into being also showed itself in the Romanesque churches of the district. The cathedral at Toulouse is the largest barrel-vaulted church in France, rivalling the ruins of Cluny Abbey in this respect. The cathedral at Albi has no transepts and is aisleless, the nave and choir being surrounded by chapels, a happy method of planning when the first requirement is space for a large congregation, and

very different to the aisle and double-aisle designs of the northern builders. There are churches in Toulouse with a span of 50 or 60 feet, which consist of a nave and apse alone.

The Albigensian wars between 1208 and 1229 deprived these Southern feudal lords of their wealth, and the leadership in the arts they had exercised passed to the kings of France, the dukes of Burgundy, and the kings of England, who were also dukes of Normandy. With the growth in power of these great royal houses came political stability, which enabled the Church to replenish the art fund from large, wealthy and ambitious communities. The province of Burgundy, on the German border, was nominally ruled by its dukes, but these temporal rulers really shared power with the abbots of Cluny, Citeaux and Vezelay. It was in the church at Vezelay, in 1146, that the French king, at the bidding of St. Bernard, proclaimed the second crusade. Here, in 1190, Philip Augustus of France and Richard the Lion-Hearted of England inaugurated their march for the Holy Land. The enthusiasm which drove the Burgundian knights and their retainers to the Crusades had its architectural counterpart in the great church of Vezelay Abbey. The nave of Vezelay was consecrated in 1104 and is Romanesque, but the choir, dating from about 1180, is early Gothic. Great transverse ribs span the nave and form square compartments, within which are plain intersecting vaults in place of the barrel-vault of Cluny, and thenceforward the transition from Romanesque to Gothic can be followed in detail, as the choir at Vezelay shows.

The early Romanesque churches in Germany were built on Italian models, with a nave and aisles, and an apse at the east end. Later a second apse at the west end became common in Germany, one apse containing the seat of the abbot and the other that of the bishop. The double apse, which was often accompanied by double transepts, adds greatly to the variety and interest of German planning. Open galleries in the walls of the western front were other happy features in German Romanesque. Much of the charm of German mediæval churches is due to the fact that they are of brick, a material which the German builders exploited with much ingenuity, the grace and variety of the exterior towers and turrets being specially noteworthy. Having a double apse, there could not be a great west door, as in Italian or French churches ; the principal German doorway was therefore on the north or south. Among the outstanding examples of Romanesque in Germany are Worms Cathedral (1125), with its twin circular towers to east and west, flanking the two apses. The red sandstone cathedral at Speier (1050), Mainz Cathedral (1100-1200), Laach Abbey (1100-1150), Lubeck Cathedral (nave 1175), and the Church of the Apostles at Cologne (commenced 1020, and rebuilt 1225), are other examples. Very beautiful, too, is the Romanesque Cathedral at Tournai, in Belgium, with its five towers and spires.

This generalisation does scant justice to the German builder, sculptor and decorator. Until the twelfth century the German builders equalled those of any nation, but when it became necessary to search for the final unity which would embody the enthusiasm aroused by the mighty

influence of Mother Church, their architects and carvers ceased to strive after originality. They retained outworn forms and proportions when the times necessitated a change. While French builders were marching forward, the Germans were doing little more than "improving" upon what Frenchmen had done, and so they failed to discover the new and richer beauties which arose in France, England and Italy. At all times German artists have tended to be imitators rather than initiators. Endowed with great skill and abounding energy, they have chosen to exploit the art ideas of others, but the pricking desire to produce some new thing has usually been absent. The Crusades and the growth of monkish power had their effect for a time, but, in so far as these forces expressed themselves in religious architecture, the church was usually a variation upon some Romanesque model or an importation of Gothic art from France. The nave of Strasbourg Cathedral (1265), was French in origin, and Cologne was a frank imitation of Amiens. Because the Germans never understood the essential differences between their round-arched Romanesque churches and the true Gothic, they added nothing of value to the work they strove to outdo. Cologne Cathedral was intended to be the largest Gothic cathedral in Northern Europe, but it was too big. It lacks the sublime repose of the best French cathedrals just because the plan was beyond the capacity of its designers.

THE NORMAN CHURCHES

Full of interest as are the Romanesque churches of Germany, they are not in the main line of achievement which culminated in a Gothic cathedral. Circumstances brought it about that France should furnish the fullest expression of the genius of Western Christendom for religious architecture. In any work of art the subordination of many details to a dominant idea is the crowning beauty, and in Northern France this ideal was exploited to the full. In essence, the problem of Gothic architecture was a problem of structure—how could Christendom find expression for its faith through the capacity of building stone to support a weight and span a space. But before the structural problem involved in the transition from Romanesque to Gothic is approached, it is desirable to have a general idea of the social circumstances in France between A.D. 1000 and 1350, the years in which secular and religious forces alike were seeking the support of Christendom. The results upon architecture are happily illustrated by some of the great Romanesque churches of Normandy.

Exiled from Norway early in the tenth century, Rollo the Ganger, at the head of a pirate fleet, sailed into the Seine and seized Rouen. For ten years he harassed the French king. Then Rollo extorted the cession of the French province of Neustria on condition that he became a Christian. He was baptized at Rouen, Neustria becoming the Northman's Land, or Normandy. After 912 Rollo and his followers settled down as feudal chiefs ruling the Roman, Celtic and Frankish agricul-

turists. The Normans were more restless and ambitious than their neighbours in the region around Paris. In particular, they were quick to follow the religious lead given by the monks of Cluny ; the Norman Abbey of Bec rivalled Cluny itself as a source of culture and art. The Normans came to France as robbers, they remained as organisers. True, they were ingenious rather than imaginative. But they had great powers of assimilation, and sought results of practical value rather than the satisfaction which arises from bringing the dreams of the spirit to earth. But this practical genius was just what was needed if the Catholic Church was to make itself felt as the central factor in resolving the chaos which had resulted from the downfall of the Roman Empire. The great round church of St. Benigne, at Dijon, built in A.D. 1001, recalls how the influence of the reformed Catholic Church spread through Western Europe as a result of the alliance between churchmen and the holders of the great fiefs. St. William de Volpiano, Abbot of St. Benigne, was a Lombard. Born in A.D. 961, he was "well instructed in the local arts," and went to France with an Abbot of Cluny. Wishing to build a church at Dijon, St. William sent to Italy for "masters of divers arts and others full of science." As a result of his work at Dijon, St. William was invited to Normandy by Duke Richard II., and founded forty monasteries and restored many old ones. "He had many of his Italian monks trained to continue the work he had begun," says the Chronicler.

After William de Volpiano came Lanfranc, another Italian, born at Pavia in 1005. As a youth he was tempted to migrate to Normandy, about the time the Normans were finally abandoning the worship of Odin and Thor. By chance he came to the monastery of Bec, where he was made Prior. Lanfranc made the monastery at Bec a centre of learning to which students flocked from all parts of France. Later, Lanfranc became Abbot of St. Stephen's at Caen. His buildings in Normandy became a model for the great English churches which followed the Conquest. As William's chief clerical adviser, Lanfranc had much to do with the two great abbey churches built at Caen by the Conqueror and Queen Matilda, after their condemnation for marrying within the prohibited degrees. A dispensation was granted by the Pope on condition that two abbeys were built, one for men and the other for women. The results were St. Etienne for men, dedicated by Lanfranc in 1077, and La Trinité for women, being the largest Romanesque churches in Normandy.

The Norman builders owed something to the limestone quarries of Caen, especially as the town lay on the river Orne, making water transport easy. The oolitic limestone of Caen was not only used in Normandy but in England. Canterbury, Winchester, and Henry VII.'s chapel at Westminster were built from it, as well as many English parish churches. Caen stone is a fine-grained, easily chiselled material of uniform colour, its chief defect being a tendency to decay in the open air.

Supplies of suitable building stone, the example of the Roman building tradition which persisted in Lombardy, the Norman genius for organisation and the urge of the hierachic ideals coming from

Cluny and Rome, might well have given to architecture the House of God which Christians had been seeking for a thousand years. As a fact, this was not achieved in Normandy during the eleventh century, but by the builders of Northern and Central France, who followed in the twelfth and thirteenth centuries. Enough has been said to suggest why massiveness and power, rather than grace and structural rightness, were the characteristics of the Norman style. The "will to power" was the dominant impression it sought to make, as we see if we recall a Norman cathedral or minster church, not as it is to-day, but as it presented itself to the men of the twelfth century.

Picture the rebuilding of a great Benedictine minster church in Norman England, as it arose at the instigation of Lanfranc or his fellow bishops and abbots. Centuries earlier, a band of missionaries had put up the first tiny church of twigs and osiers on some grassy islet set in a waste of moor and marsh. A village was added to the little monastery, as larger and larger stretches of corn or orchard land were reclaimed from the marsh under the direction of the monks. Then a church of ragstone took the place of the first praying-house ; to give way, after the coming of the Normans, to a pile which was at once "a joy to the servants of God and a sure resting place in time of trouble." Maybe the heavy masses of a Norman castle arose hard by, its polygonal keep standing at attention beside the massy nave of the abbey church. A frowning fortress of God—that was what the Norman intended when he built a minster church. Each stone roughly squared and no more. No effort after mere surface beauty. So far as the exterior was concerned, the native strength of the quarried stone was beauty enough. The double walled castle did not seem more secure than this fortress of the Faith. Only the sharply defined cruciform shape of the church, and the bells which sounded from the western towers, told that this was in truth a House of God.

Within, the Norman church was very different. Of the exterior, its builder would have said "that is only the wrong side of the stuff." Inside the church, all trace of the woven thread—the axe-hewn surfaces left by the mason—were hidden in a glow of colour and tapestry work. In early Norman times, the builders' art was secondary rather than primary. The bare spaces of the walls were filled with pictures, some in monochrome, others in colour—red and yellow ochres and lamp-black—each with its story written below in elegiac verse. The drawing was crude but the low-toned pictures were redeemed by the gorgeous distemper in which they were framed.

The memory of this crude picturing is only the first levy upon the treasure of colour which accumulated in a Norman minster church or cathedral. The pavement was made of many coloured tiles ; above, a long wooden ceiling glowed with stars and the emblems of the Apocalypse. Beams and rafters were covered with chevrons and scrolls, rich in pigment and gold leaf. Lines of blue, scarlet and gold relieved the rafters of the wooden roof. In the splays of the windows were designs of flowers. On the retables above the altars were images of silver and gold, bronze and alabaster. Rich-dyed hangings served a decorative purpose,



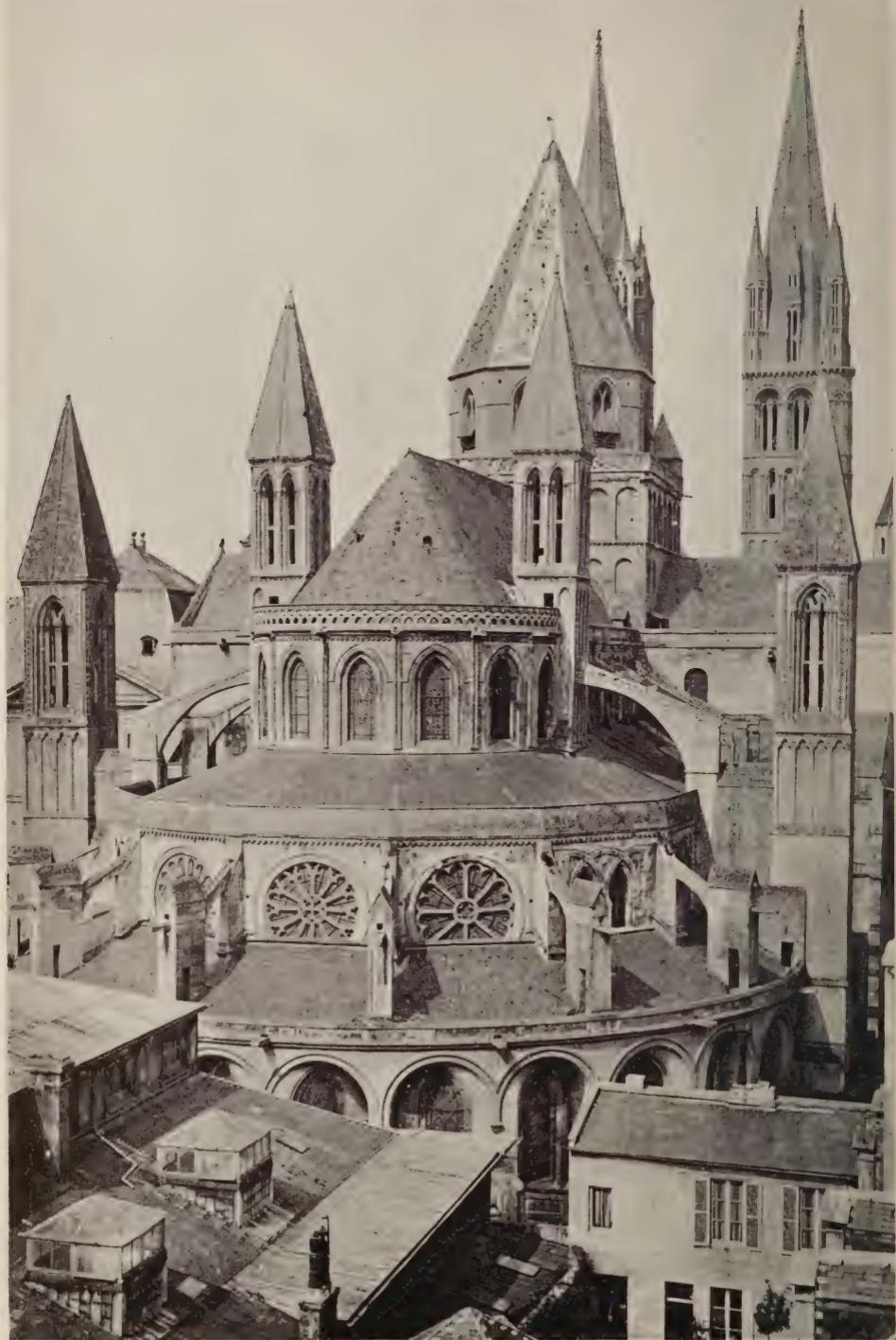
ST. FRONT, PERIGUEUX

N. D. photo



WORMS CATHEDRAL

(see page 161)



L'ABBAYE AUX HOMMES, CAEN

N. D. photo

(see page 170)



BOURGES CATHEDRAL: THE NAVE

N. D. photo

(see page 176)

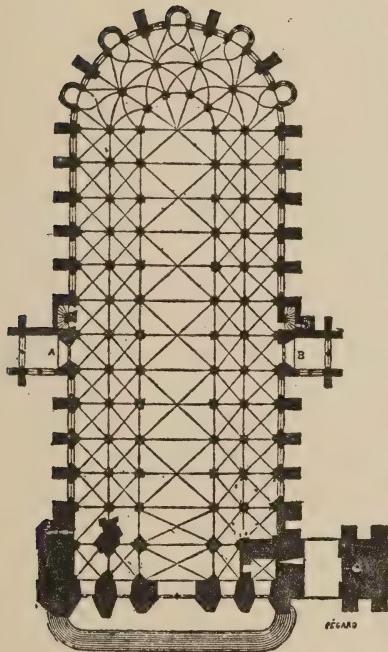


RHEIMS CATHEDRAL

(see page 177)

and also protected the shivering churchmen from the cold of winter ; illuminated and embroidered screens ; carved woodwork ; a black basalt font. And, lastly, richest of all the colour treasures of the church, the windows with their deep-toned glass, small in comparison with the windows of later centuries, but each a mine of be-jewelled light.

A frowning fortress of God without, but, within, made splendid for the bride by a rich dower of colour and ornament—such was the Romanesque House of God at the moment of the transition to the full glories of Gothic.



BOURGES

(see page 176)

CHAPTER XI

STRUCTURE IN ARCHITECTURE. FRENCH GOTHIC

The Romanesque and Norman churches, built under the guidance of Cluny and embodying the ideas of the Hildebrandine Popes and their temporal allies, failed to give Christendom the perfect House of God. In a Norman church there was an over-plus of building material. True, this over-plus was made to serve a definite aesthetic purpose ; it had a message of power of its own. But, in part, the over-plus was due to poor building. The early Romanesque builders had to collect their material from any available source ; they could not draw upon the resources of a far-flung empire. Consequently, they used rubble and small stones where they would have preferred granite and marble, had granite and marble been available.

As the decades passed, the church builders realised the deficiencies in their method, and masons and craftsmen were trained who proved themselves able to dispense with the over-plus of material. Utilising the new methods, the builders of Christendom endowed their work with a new significance and a meaning inextricably commingled with the ecstatic zeal and spiritual ecstasy which the ideal of an all-powerful Church, obeying an all-powerful Pope, had aroused. It was then the Romanesque style became Gothic.

The term Gothic came into use during the eighteenth century. Its association with the Goths and Huns who destroyed the Roman Empire suggested the rough and rugged qualities which were held to distinguish mediæval architecture from the simpler and more harmonious neo-classical style which had come into favour after the Reformation. What was originally a term of reproach now signifies the most logical and vital development in the ages-long story of religious architecture. Everywhere in Gothic art is to be found a fusion of two motives, one witnessing to an intense interest in mundane pursuits, and the other to a whole-hearted absorption in things spiritual. In mediæval times, the hold of men upon things earthly was just as strong as their urge towards the things of Heaven. The inward rapture and the joy in sheer physical energy found a single expression in stone and structure. This is what might be expected. The purpose of a House of God is to allow of worship according to an established ritual, and this ritual is only another embodiment of thought and emotion which the beholder may equally seek in art. The ritual and the building, in fact, express one and the same thing.

The coiners of the term "Gothic" went to the root of the matter when they consciously compared the mediæval House of God with an ancient Greek temple, and the Franco-Italian buildings which followed

the Græco-Roman tradition. After centuries of experiment by Lombard, Romanesque and Norman builders, architecture was to prove itself capable of embodying a new ideal, different from, though not necessarily superior to, the simple directness of the Greek temple. Whereas the Greeks accepted the fundamental conflict between the column and its burden, the Gothic masons and builders strove to make the burden seem an illusion. The Greek was right: the force of gravity is an actuality, not an illusion. It is a fact from which there is no escape, save in dreams. Nevertheless, the inventions of the Gothic builders were so ingenious and their methods of creating illusion so perfect, that they gave to their columns and arches the mysterious beauty of a dream world in which the forces of gravity appear to lose their power to oppress weak humanity. Whereas a Doric temple was built by men who had found an escape from the burden of life in a balance between the attainable and the unattainable, a Gothic cathedral was built by rebels who refused to acknowledge the limits of experience set by mundane things.

It may be that the Gothic builders never found a final harmony, but in their search they disclosed beauties which answer to some of the deepest searchings of the human heart—the urge towards the unknown which will complete what is wanting on the mundane plane. Whereas Greek architecture was dominated by the horizontal line, the characteristic line in Gothic is the vertical, which is ever striving upwards. The Gothic arch is not flat or even semi-circular, but pointed. "The arch never sleeps," complained the Indian builder. As a source of ceaseless activity, the Gothic architect used the arch in its most active form to demonstrate the ease with which burden can be borne. In comparison with Romanesque, the Gothic wall was broken by windows, which became bigger and ever bigger; the buttress was introduced to aid the illusion of constant effort. The vaults reached higher and higher, until a Gothic cathedral was actually able to express the energy which drove Western Europe to the Crusades, which created the Great Orders and developed Catholic ritual, which invented the feudal system and, finally, gave rise to the bourgeoisie of the later Middle Ages.

In opening this survey of religious art reference was made to Schopenhauer's analysis of the essential elements in architectural art. Recall his argument.

"We see in the good antique style of architecture every part, pillar, column, arch, entablature, attain its end in the diretest and simplest manner, at the same time displaying it openly and naïvely. The tasteless style of architecture, on the contrary, seeks in everything useless, roundabout ways and delights in caprices, and thereby hits upon aimlessly broken and irregular entablatures, grouped columns, fragmentary cornices on door, arches and gables, meaningless volutes, scrolls, and such like. It plays with the means of art without understanding its aims, as children play with tools. Of this kind is every interruption of a straight line, every alteration in the sweep of a curve, without apparent end. On the other hand it is just that naïve

simplicity in the disclosure and attainment of the end, corresponding to the spirit in which nature works and fashions, that imparts such beauty and grace of form to antique pottery, that it ever excites our wonder anew.

"If we are to attribute this spirit and fundamental thought to Gothic architecture, and would like thereby to set it up as the equally justified antithesis of antique architecture, we must remember that the conflict between rigidity and gravity, which the antique architecture so openly and naïvely expresses, is an actual and true conflict founded in nature ; the entire overcoming of gravity by rigidity, on the contrary, remains a mere appearance, a fiction accredited by illusion. Every one will easily see clearly how, from the fundamental thought given here, there arises that mysterious and hyperphysical character which is attributed to Gothic architecture. It principally arises from the fact that here the arbitrary has taken the place of the purely rational, which makes itself known as the thorough adaptation of the means to the end. The many things which are really aimless but yet are so carefully perfected, raise the assumption of unknown, unfathomed and secret ends, *i.e.*, give the appearance of mystery.

"The brilliant side of a Gothic church is the interior ; here, the effect of the groined vaulting borne by slender, crystalline, aspiring pillars, raised high aloft and, all burden having disappeared, promising eternal security, impresses the mind. . . . Whoever then insists upon Gothic architecture being accepted as an essential style, may regard it as the negative pole of architecture, or, again, as its minor key."

There is little to be added to Schopenhauer's analysis. It only remains to illustrate it. From his argument arises the corollary that a Gothic church cannot be really appreciated without constant reference to the structural principles at the basis of all architectural art. Whatever the Gothic builder was finally able to express by his work, the origin of a Gothic church lies in the effort to put a roof of stone over the nave and aisles of a lofty basilica. The gradual evolution of vaulting finally brought about the transition from Romanesque to Gothic.

For scores of years the Romanesque builders experimented in vaulting ; the problem was not solved until the Normans hit upon the plan of covering the space with a framework of ribs and laying the stones in courses from rib to rib. The novelty of the method lay in the use made of the principle of balance as a means of ensuring stability, a principle which, incidentally, did away with the necessity for columns and piers of great size and strength, Sir T. Jackson, in his *Reason in Architecture*, gives an illuminating account of the influence of structure upon a Gothic church. He shows that an arch is only a system of wedges, each of which is driven home by the load on its back and each striving to rend the structure apart. From this endeavour to rend the structure apart arises the *thrust* of an arch, which must be resisted by the immovable mass which constitutes the abutment. Only if the abutment stands firm is the arch an element of strength. If the abutment counteracts the

thrust, there is security ; if not, there is disaster. Gothic vaulting is nothing but an application of the principle of balance to the roof. The ribs of the vault, balanced the one against the other, and not the material between, are the real roof. What the Gothic builders did was to create a science of vaulting out of the idea of balance which the Romanesque masons had tested. Thus Gothic science made possible the light, graceful piers and large windows which characterise the later style. With pointed arches, fully-developed rib vaulting, light clustered piers, large window spaces and flying buttresses, church architecture passed from Romanesque to Gothic.

At least as interesting as the structural reasons for the change from the massive columns and heavy rounded arches of the Norman style is the problem how the people were persuaded to assent to the new thing. It may be that they were not so unfamiliar with the æsthetic effects of the pointed arch as might be thought. Recall the nave of a Norman church—St. Cuthbert's at Durham, the Abbey of St. Peter and St. Paul at Gloucester, or St. Bartholomew's, Smithfield, as evening is coming on. A half-light is stealing through the windows of the western aisle. One side of every column and arch is clothed in shadow, but the opposing face of the arch, gathering and giving the rays of the setting sun, seems to arouse a new emotion. The heavy round pillars have become lighter ; they spring more surely towards the burden they are carrying. The rounded arches are round no longer. The sharp stroke of sunlight on the one side and the deep shadow on the other, enclose a new space ; they suggest another and more inspiring line. The weight resting on the columns suddenly seems borne with greater ease—as it were by a youth with the vigour of the twenties, rather than the full strength of manhood. The barbaric power, the solemn grandeur of an immovable pile, has given place to a new message. This is the Early English style. When it came into being, every stone in the church seemed to gain life because the work it had to do was plain. The structural parts of the church were not only so contrived that they did their work, but they were contrived that they might be seen doing it. The pointed arch took on an element of humanity, expressing the eternal tension which was the mood of the builders of a Gothic church, as it is the mood of men and women to-day. Not in one, but in every detail of the architectural scheme, there was unappeasable desire and restless upspringing. Above the great arches of the nave were those of the triforium and clerestory. All echoed the prevailing mood or pointed to the central mystery of the Catholic church—the sacrifice of Calvary as solemnised in the Mass at the high altar. As every part of a Gothic cathedral spoke of energy and desire, so every line tended towards the east end where the Mass was celebrated.

In the Gothic style, the ribs of a vault are sinews doing work as certainly as the muscles of a body do work, and they were evolved in the same organic manner. The vault was built in skeleton and the intersections were filled with light stones. Instead of the massive walls required by the heavy barrel-vaults of Romanesque and early Norman times, the Gothic architect was able to concentrate the thrust of a given

vault at special points. Sections of a wall which were no longer required as an abutment could be used for window space. This is the purpose enshrined in a Gothic building. Concentrate all the supports of the stone vault in vertical shafts, between which are screens of coloured glass. Let these shafts run as high, let the screens of glass be as large and the colour as glowing as possible. If the means by which gravitation is defied cannot be altogether concealed, let the interior, at any rate, be sublime in its soaring beauty, even if the buttresses of the exterior are there to witness that there are forces in nature which may be tamed, but cannot be ignored.

About A.D. 1100 the church builders began experiments on a large scale in new methods of vaulting. Mention has been made of Vezelay Abbey, and Mr. Bilson has shown that ribbed vaults were used in the choir of Durham Cathedral, which was built about 1104. Mr. Bilson says every part of the church was covered with ribbed vaulting between 1093 and 1133. By 1150 the new method was generally adopted throughout Western Europe. The heavy piers in an early Norman church had carried the burden of the vault. The walls were thick and the thrust from the vaulting and superstructure was distributed over the greater part of the wall face. Under the new system of ribbed vaulting and pointed arches, the various weights were gathered together, distributed to piers or buttresses, or carried to the ground. The wall space, being only a connecting link between actual buttresses, was free for window space. An outstanding defect in the Romanesque wagon vault, especially in northern lands, had been the lack of lighting in the upper part of the nave. Cross vaulting now allowed of direct light from the clerestory windows.

In working out these structural problems the church builders displayed a logic and understanding only less complete than that of the Greeks, and a capacity for invention and engineering skill which the Greeks had never attempted. Apart from their definite work, the outer buttresses were used to give scale to the exterior and to divide the nave wall into bays corresponding with the interior arches. The Gothic builders found that a buttress weighted heavily on top need not be more than half the size of an unweighted buttress. This was their structural justification for decorated pinnacles, which are not mere ornaments but evidence that the Gothic architect converted a structural requirement into an ornamental feature. Owing to the greater height of a French Gothic church, pinnacles were of less importance in English than in French Gothic. In the twelfth century, the Gothic builder even cut a niche in his buttress and filled it with statuary, as at Wells. In Gothic, as in Hellenic architecture, the rule holds that decoration should emphasise a definite structural necessity, and never be mere purposeless and meaningless ornament.

FRENCH COMMUNES

Nevertheless the question remains. Why, after about 1150, was a new structural method adopted of rearing a lofty vault over a House of God

and supporting it by pointed arches and exterior buttresses? Why not 100 years earlier? Or 100 years later? Cathedrals and minster-churches of rich beauty and significance had been put up by the Romanesque builders; why was not Christendom content? Many of these great churches were barely finished; yet churchmen in all parts of France and England, obeying as it seemed a single impulse, were driven to rebuild their churches in accordance with the new ideas. Surely, builders and worshippers alike found in a Gothic church something which was not to be found in Romanesque. The strain of bonded piers and the travail of the labouring vaults answered to something in Gothic life. Was this something the ceaseless contentions of kingdoms, principalities and communes, in the making? A Gothic cathedral was the creation not of a state organisation or even of an international church; it was raised by men who felt the drive of life, and had a sense of the harmony that arises from strenuous endeavour, a harmony which even failure may not destroy.

Romanesque was the architecture of a monastic and hierarchic age. Gothic was the expression of a fuller religious zeal, of a deeper pride. Whereas the makers of Romanesque were monks, and the allies of monks, the creators of Gothic were mostly freed townsfolk. Just because the Communes were strongest in France at the critical time, the Gothic style is found at its fullest and best in the French towns, particularly in the years following the consolidation of the French kingdom, which Philip Augustus accomplished with the help of the Communes. Understand how Laon, Le Mans, and Chartres won their liberties, and the secret of Gothic will reveal itself. It is not an art of mystic enthusiasm alone. In a great French church, a dominant impression is that its builders were men who never lost their hold upon the practical ends of life. Gothic architecture represents a combination of physical energy, stern logic and spiritual ecstasy. It was men who had all these qualities who found the massy walls and low barrel-vault of the Romanesque church inadequate to express the surge of ideas and emotions, which at the same time were giving rise to the Crusades and the great Orders. If the Doric Parthenon enshrined the civic pride of Athens, a great French cathedral did the same service for the mediæval city. If a deep absorption in things of the spirit was one factor in the making of a Gothic church, so was the intensity of energy which won liberties from the feudal barons and held them.

The exchange of wares was a primary reason for the rise of mediæval towns. But the growth of trade was unimportant in its results compared with the communal rights which came to the burghers when once the privilege of holding a regular market or fair had been gained. These communal rights distinguished the towns and cities of the Middle Ages from the earlier agricultural village and, indeed, from the trading cities of to-day, which have largely merged their individuality in that of the nation. Communal rights were not secured without a struggle, sometimes with the king, more often with a feudal lord or bishop. The right to trade was of manifest value, and the agriculturist in the village had to pay for it; at first by tolls or dues given to the bailiff of the

feudal lord ; later by a money rent, which covered the right to hold a weekly market or a yearly fair. In course of time, these dues were paid, not by individual traders, but by a merchant-guild representing the burgesses of a town. The regulation of wages, the control of monopolies, and the admission of apprentices to guild-membership, were other rights which accrued to a town. In the eleventh century, mediæval burgesses in all parts of Western Europe knew that communal rights were not only worth securing but worth defending. The burghers made alliances with the bishop against the neighbouring feudal lord or king, or with the king against the local bishop or feudal lord. The struggle for communal liberty lasted until the fourteenth century. In the end, the greater towns of Italy, France, Flanders and, finally, Germany, secured rights which amounted to independence. They virtually became city-states. Rights of government were vested in delegates chosen by the craft and trading guilds, or some other body recognised by the burghers. As their wealth increased the French bourgeoisie sought to express its pride in the communal life which it had created. What could be more fitting than a place of worship which would not only witness to the might of the town—Amiens, Rheims or Bourges—but would testify to the equally inspiring thought of the all-powerful Catholic Church. In A.D. 1145, at a time when the cathedral of Chartres was being rebuilt, Abbot Haimon, of St. Pierre-sur-Dives, Normandy, writing to the prior of his dependent cell of Tutbury, Staffordshire, described the wave of enthusiasm which impelled rich and poor to labour together. Just as the town walls were put up by communal effort in times of danger, so the churches of the municipality were set up. The Abbot tells :

" Then He drew to Himself those that started away from Him, and recalled the wandering, and taught them a new manner of seeking Him, a manner new, I say, and unheard of in all ages. For, who ever saw, who ever heard, in all the generations past, that kings, princes, mighty men of this world, puffed up with honours and riches, men and women of noble birth, should bind bridles upon their proud and swollen necks and submit them to wagons which, after the fashion of brute beasts, they dragged with their loads of wine, corn, oil, lime, stones, beams and other things necessary to sustain life or to build churches, even to Christ's abode ? Moreover, as they drew the wagons we may see this miracle that, although sometimes 1,000 men and women, or even more, are bound in the traces, yet they go forward in such silence that no voice, no murmur, is heard. . . . Nor can we wonder that the aged undertook this burdensome labour for the multitude of their sins ; but what urged boys and children to the work ? For you might see them, with their own little kings and leaders, bound to their laden wagons, and not dragging with bowed backs like their elders, but walking erect as though they bore no burden and, more wonderful still, surpassing them in nimbleness and speed." (See Coulton, *A Mediæval Garner*, p. 102.)

Such communal enthusiasm is not without parallel in the twentieth

century. Some years ago in Jersey City, parties of men and women were to be seen building a church after their day's work was done. By lantern or torchlight, they mixed their mortar, or laid the bricks, for Mrs. Sarah Earle's Apostolic Church, believing that if they freely offered their physical effort, material and expert skill would be forthcoming. The circumstances under which the noble Benedictine Abbey at Buckfast was built by the monks may also be recalled.

The Black Monks of the Devon monastery commenced to build their abbey church with a capital fund of 20s., and the services of six skilled builders, working under a master-mason. Twenty-five years later a church, which would have cost £150,000 if it had been built by a contractor, was ready for consecration. The original driving force was faith and faith alone, but, as the years passed, others became interested and the "miracle of Buckfast" was completed by the Catholic community as a whole. In witness to the fact, three cardinals and fourteen bishops took part in the consecration service in 1932.

It must not be thought that malcontents and critics were wanting in Christendom during the Middle Ages. If the many approved, there was a minority who considered church building foolish and wasteful. Mr. Coulton recalls a mediæval condemnation, based upon the allegation that the Gothic church builders seemed unable to believe that the world was doomed to come to a speedy end. If they did, urged the critics, they would never rear such lofty masses to the very sky, or lay such foundations, even in the abysses of the earth.

"Wherein they resemble those giants who built the Tower of Babel, rearing themselves against the Lord. Moreover, this superfluity and costliness of buildings and stone is a cause why we have in these days less pity and alms for the poor. Let us remember what Esaias saith : 'Heaven is my throne and the earth my footstool. What is this house that you will build to me ? and what is my place of rest ?'"

It is easy to see why in the Middle Ages the architect was rather the trainer of a team than the designer of a building, working in an office miles away from the actual work, as is often the case nowadays. At first, monks were often trained for the necessary expert work. There were Magistri—fratri, as well as the travelling master-guildsmen from Lombardy or elsewhere. In the church of San Francesco, at Lodi, there is a picture showing San Bernardino directing a group of monks who are building a convent. It is on record that at the monastery of Tiron there were 500 artists of various crafts.

In the thirteenth and fourteenth centuries lay master-masons were more generally employed by the bishops for expert advice and supervision. These master-masons were men of education such as De Honnecourt, author of a well-known book upon the mason's craft. This addition of lay experience in church building meant much, but the deeper truth is that a House of God at the end of the Middle Ages was due, not to the skill and imagination of an architect of genius, as it was in the Renaissance and as it is to-day, but was the result of team work. In the windows at Chartres, there are pictures of these Gothic builders.

A mason, in a round hat, lays a cornice stone, while another carries a carving up a ladder to set it in its place. In the background are four sculptors carving full-length statues for a porch. One statue has been roughly blocked out, and the mason is resting while his assistant is putting the finishing touches to the work. From the records we may guess at an occasional name. At Chartres, for example, we read in the Necrology of Notre Dame of "Jean, son of Vital, the clever and faithful carpenter of the church, who always worked with love and zeal at the work of this Church." But, as a rule, we can only recognise team work—the co-operation of craftsmen who shared the knowledge accumulated by their fellow workmen, and were ever passing on this store of experience, through guild organisation. So much is plain when we read of the building of such churches as Notre Dame at Paris and Chartres, and of the great churches at Bourges, Amiens and Rheims. Facts and documents regarding the Gothic builders have been summarised by Mr. Francis Andrews in his *Medieval Builder and his Methods*, and in such works as *The Monastic Craftsman* by Mr. R. E. Swartwout, and *The Medieval Mason*, by Professor Knoop and Mr. G. P. Jones.

When Charles the Simple, the last of the Carlovingian kings in France, died in 929, political power had already passed to the Counts of Paris. Hugh the Great had the gift of patience, which is essential to kingdom as well as to church building. He stored treasure and continually added fiefs to his own estates between the Seine and the Loire. He was succeeded by Hugh Capet, another cunning, resourceful and tenacious ruler, who utilised the feudal system to the full in building up the power of his house. By the end of the tenth century, Hugh, with his capital at Paris, made the House of Capet the most stable political entity in the land and himself king of France. Largely owing to this centralisation of authority a new vigour in social life showed itself in central France. Relative peace was established and trade flourished. Philip Augustus (1180-1223) did even more, not only for the House of Capet but for the prosperity of Central France, by allying the Crown with the Communes against the hired levies of the feudal counts. Troops, furnished by the French Communes, helped Philip Augustus to consolidate his power. The citizens of Soissons and Beauvais won the battle of Bouvines. When Philip Augustus died, seventy-eight Communes had obtained charters, and thirty-nine great churches had been commenced. The bishops had also made a common cause with the Crown and the Communes, and they shared in the triumphs of their allies.

The reigns of Louis the Young, Philip Augustus, and Saint Louis (1226-1270) cover the building of the greater French cathedrals. Louis VII's minister, the Abbé Suger, perhaps did more than any Frenchman to bring about the change from Romanesque to Gothic. It was the time of St. Bernard's revolt against the abuses of Benedictine monasticism. A convocation of nobles and clergy at Vezelay in 1145, at which St. Bernard preached, initiated the Second Crusade. The streets of Vezelay rang with shouts of "The Cross! the Cross!" Two years later a French army gathered at Metz, and marched for the Holy

Land under the leadership of Lewis the Young. Suger utilised the enthusiasm for Catholicism, which showed itself in the Second Crusade, to rebuild the Abbey Church of St. Denis. The need was urgent. On festival days, the crowd viewing the relics of Denis, the first bishop of Paris, was so great that many were trodden underfoot. Suger devoted all that could be spared of the abbey resources to the work. Counts, burgesses and guilds offered money or goods. Bodies of pilgrims harnessed themselves to carts, and dragged stone columns for Suger's church along fourteen miles of road from the quarries of Pontoise ; coming to the unfinished church, they broke into a song of praise.

It was while Suger's abbey church was being rebuilt that the Oriflamme of St. Denis took the place of St. Martin's cloak as the royal standard of France. A German army, under the Emperor, Henry V., was threatening Paris, and Louis went to pray before the relics at St. Denis. He was met by the Pope Eugenius and the Abbot, who took the standard from the altar and gave it to the king. Legend told that the Oriflamme, which was made of silk of gold and flame tones, had fallen from heaven. Until it was borne by the French king it had been carried by the Count de Vexin, the first liege-man of the abbey of St. Denis.

A few years later, in 1163, the foundation stone of Notre Dame, Paris, was laid. Then, with Philip Augustus and Saint Louis, came the final flame of pious enthusiasm which gave to France, Chartres (1194), Bourges (1199), Rouen (1202), Rheims (1211), Amiens (1220), and Beauvais.

The cathedral church of Paris, Notre Dame, has been called the tomb of the Romanesque and the cradle of Gothic. When Christianity was established in Paris, about A.D. 365, under Valentian I., a church was built for the bishop and dedicated to St. Stephen. After Clovis, a new church was built near by, dedicated to the Virgin. In 1163, the two churches were united into one. The new Notre Dame, in the transitional style, was consecrated in 1182. In the thirteenth century, a communal church in such a centre as Paris required an open hall. Not being in the main a pilgrim church, Notre Dame had no narthex. Instead, there were double aisles around both nave and choir, along which pilgrim processions could move without interfering with service in the nave or Mass at the High Altar. On occasions of high festival the galleries in the triforia were also open. If the imagination will not pass to the Middle Ages, recall Notre Dame in the nineteenth century when the Dominican, Lacordaire, thrilled the crowded cathedral with his cry :

" People, people, tell me. What do you ask, what do you want of me ? The Truth ? Then you have it not ; you seek it ; you wish to receive it. You have come to be taught."

Being the church of the Virgin Mary, four of the six doorways are in her honour, and the Queen of Heaven has also the central position in two of the rose windows. The double aisles of Notre Dame not only allowed of imposing western towers, but gave breadth to the three western doors, the northern and southern doors occupying two bays,

and yet leaving the full width of the nave free for the central doorway. This noble facade with its statues of the kingly ancestors of the Virgin dates from the early years of the thirteenth century, and the figures and reliefs once stood out, glowing in colour, from a background of gold. On the central doorway is a representation of the Last Judgment, with the dead arising from their graves, carved upon the lintel. Above is the archangel Michael, Lord of Souls, carrying out the duties of the Graeco-Roman Hermes as guide of the dead, with the damned on his left hand and the elect on his right.

Bourges, built between 1199 and 1230, is also a vast sacred hall of assembly. It has no transepts, so the nave and choir form a single architectural whole, giving a sense of immense length. (See plan on page 165.) Bourges has a double aisle to both nave and choir, but the intermediate aisle has a triforium and clerestory. While the nave is 123 feet high, the aisles are only 71 feet high; the decoration of the double aisles can thus be seen beyond the piers of the nave, suggesting wondrous profusion of effort, and exalting spiritual fervour. In strong contrast with the simplicity of the central idea—a building without transepts, in which the lofty columns and vaulting are uninterrupted from western doorway to eastern apse—are the low clustered piers of these aisles, with their carved leafage and rich mouldings. The unity of design at Bourges is unique even among the cathedrals of Northern France. At the west end the towers project beyond the aisles, thus allowing of no fewer than five double doorways leading into the nave and the four aisles. Over the central door is a memorable Last Judgment, dating from a time when Gothic masons had not only achieved perfect skill but were imbued with frank enjoyment and interest in the themes portrayed. The twelfth century sculpture on the side porches at Bourges are splendid in achievement, but the west front is among the Gothic masterpieces. Whether it be the charm of an angel face, the terror or hope of a human creature undergoing judgment, or the glee of a grinning devil, the carvers who worked upon the west front of Bourges displayed the acme of their craft. There are no children or aged men and women among those who rise from the tombs; all are in the full vigour of manhood or womanhood, of the age of Christ at the time of His death. From the "hell-mouth" the guildsmen of the Middle Ages derived the property, with moving eyes and joints, used in the Harrowing of Hell and similar scenes in mystery plays. As it was carved in stone above the western doors of Bourges, so it was painted by the rude draughtsmen of Surrey on the wall of Chaldon Church. The conception was taken from the description of the Leviathan in the 41st chapter of Job, the Leviathan being regarded as Satan :

" His neesings flash forth light,
And his eyes are like the eyelids of the morning.
Out of his mouth go burning torches,
And sparks of fire leap forth.
Out of his nostrils a smoke goeth,
As of a seething pot and burning rushes."

Unique in plan, and remarkable for the naturalism of its symbolic carving, Bourges, nevertheless, bears evidence that the enthusiasm of the Communes for church building was passing. Unlike Chartres, Bourges attracted few pilgrims on whom the church could rely for building funds. Consequently, it was hastily completed with insufficient means.

Rheims Cathedral, the church of St. Remigius, did not suffer from lack of funds, and upon it masons and sculptors lavished their best skill. Remigius was a Gaulish noble, born in 439, who made Rheims the Canterbury of France. Gaul had lately been overrun by the Franks under Clovis. When Remigius converted Clovis, and arranged his marriage with the Christian princess, Clotilde, the results were much the same as when Augustine converted Ethelbert, through the agency of Queen Bertha. For a thousand years the history of Rheims was merged in that of the French kings. If Paris was the political capital of France, Rheims was the religious capital, and the right of the Archbishop of Rheims to consecrate and crown the kings was admitted. The present church was built after the fire of May 6, 1210, and was not completed until 1428, the funds being subscribed partly by the clergy and townsfolk of Rheims and partly by "indulgences" granted to donors by the Pope. The plans were drawn by Jean d'Orbais, the length being 455 feet, the greatest width 160 feet and the height 123 feet. Two thousand three hundred carved figures decorate the cathedral, the interior sculptures being only less remarkable than the exterior. Very beautiful is the carving on the capitals of the piers, the vine, oak, ivy and fig-tree elements being varied by the occasional introduction of figures, including a charming Vintage Scene cut upon a pillar in the nave. The chevet, completed about 1240, with its radiating chapels, is one of the finest in France. But the glory of Rheims is the western facade, with its rose windows and its astonishing array of statuary. The Visitation group has the power of the best Græco-Roman work, which, indeed, it recalls. The door leading to the northern transept celebrates St. Remi and other archbishops of Rheims. The Apostles in the Last Judgment scene recall that Christ the Judge was accompanied by his twelve disciples, "seated on twelve thrones and judging the twelve tribes of Israel."

Amiens cathedral rose around a tiny chapel built above the grave of St. Firmin, but it became the Gothic Parthenon after the rebuilding of 1220, under the direction of Robert de Luzarches. In sixty-eight years the work was done, save the towers, the north transept and the *fleche*. If perfection is a fault, this is the short-coming of Amiens—what it lacks is the daring of a craftsman who glories in self-expression just because he feels he still has realms to conquer. It was begun and finished in a great period and represents the climax of Gothic art, whether in design, construction or sculpture. The vault of the nave is 140 feet above the pavement, necessitating double flying buttresses on the exterior, one above the other, the upper supporting the clerestory and taking the thrust of the timber roof. When the original glass was in the great windows the glow of colour must have been splendid indeed.

In the western doorways, the central figure is Le Beau Dieu, Christ with his right hand blessing those who enter the church, and in his left, carrying the gospels. Below, underfoot, are the lion, the dragon, the basilisk, and the adder stopping its ear with its tail, a type of unbelief, all four beasts recalling the indebtedness of the sculptor to the *bestiaries* of the Middle Ages, manuals in which animals are linked up with their symbolic equivalents. The sculptors of the apostles and prophets on the west front of Amiens were indebted for their characterisations to what M. Mâle calls "the biographical dictionary" of Bishop Isidore of Seville, who died about A.D. 636, and whose books were popular throughout the Middle Ages. The influence of such books is found not only in France, but throughout Christendom. The lion and the dragon appear upon a corbel of the Percy tomb in Beverley Minster ; in St. Mary's Museum, York, there is a Romanesque carving of Christian fighting with two great dragons.

Of the woodwork at Amiens, Ruskin wrote : "Aisles and porches, lancet windows and roses, you can see elsewhere as well as here—but such carpenter's work you cannot. It is late—fully developed flamboyant, just past the fifteenth century—and has some Flemish stolidity mixed with the playing French fire of it ; but wood-carving was the Picard's joy from his youth up, and, so far as I know, there is nothing else so beautiful cut out of the goodly trees of the world. Sweet and young grained wood it is : oak trained and chosen for such work, sound now as 400 years since. Under the carver's hand it seems to cut like clay, to fold like silk, to grow like living flame. Canopy crowning canopy, pinnacle piercing pinnacle—it shoots and wreaths itself into an enchanted glade, inextricable, imperishable, fuller of leafage than any forest, and fuller of story than any book."

The aim of the maker of Beauvais was to out-soar Amiens. Whereas Amiens was 140 feet high, the choir of Beauvais was 154 feet from floor to vaulting. The foundations were laid in 1225 after a design by Eudes of Montreuil, architect to St. Louis. Commenced in 1247, the choir was finished in 1272. Twelve years later the vault fell and the work of rebuilding recommenced and continued until 1347. Transepts were added in the sixteenth century, but the nave was not carried beyond the first bay and has not been built to our own day. When a spire was added about 1560 it was carried to 445 feet, the highest in France. Jean Vast, the architect, in his pride, claimed that he was another Michelangelo ; the spire of Beauvais humbled even the dome of St. Peter's. Five years passed and Jean Vast's spire fell, as the choir vault had fallen 300 years earlier. The mass of the nave was not present to counter-balance the lateral thrust of the tower and spire ; the forces of gravitation triumphed, as they must when human effort pits itself against the eternal limitations of human life. From the desire to suggest that gravity was an illusion, Gothic architecture had arisen and failure to solve the structural problem brought it to an end. The builders of Northern France had ventured over-much. Throughout, the tendency of the Christian builders had been to pass beyond the limits of stability. This was so in Romanesque and in Norman times : it was so to the end

of the Gothic age. The masons of Christendom were men, and just because they were human, the principle of their effort was that of natural growth—effort being followed by failure and failure by repair, until temporary stability was reached, or the patience and resources of bishop, prince or commune were exhausted. Not for the Gothic builder the horizontal line of safety ; his choice was the vertical upthrust of limitless desire. The wondrous choir of Beauvais, with its halo of chapels, each set in an aureole of glassy light, is at once a token of his effort, his success and his final failure.

If a single cathedral had to be selected to represent what is most characteristic in the architecture and sculpture of France, probably the general choice would be Amiens, but it has been said that at least four French churches would contribute parts to a perfect Gothic whole. Our own choice is to illustrate the unity and diversity, the vitality and the calm, of a thirteenth-century House of God by the story of our Lady of Chartres. The cathedral is built on a low hill, overlooking the valley of the Eure, a fertile stretch of country known as the granary of France. For a score of miles in all directions its western towers may be seen singing the glory that once was Chartres. In Druid times, when an oak forest covered the flat plain of La Beauce, legend tells that homage was paid to the " Virgin who shall bear a son " on the spot where SS. Potentian and Albin were to preach 250 years later, and where they were to consecrate an oratory, " to the glory of Mary, mother of God." Here Modesta, daughter of the Roman governor Quirinus, died under torture and was flung into a well within the precincts of the ruined chapel. The well of the martyr has been located behind the altar of Notre Dame de Sous Terre, in the crypt of the cathedral, the largest in France, and only surpassed in size by the crypts of Canterbury and St. Peter's, Rome. It includes two galleries, 366 feet long by 17 broad, two transepts and seven apsidal chapels. Much of the masonry of this crypt dates from the tenth century, but a portion of the old Gallo-Roman town wall can also be seen, and layers of Roman bricks from the church of St. Aventin recall the thousand years of time which went to the making of the cathedral.

When the church at Chartres was rebuilt in the time of Constantine, the chapel to " The Virgin who shall bear a son " was not disturbed. Instead, a larger church was built around and above, which was burnt by the Northern invader, Hastings, in A.D. 858. Three years later Charles-le-Chauve, coming upon the ruined church, determined to restore the fortunes of Notre Dame, Chartres, by presenting the foundation with the sacred shift of the Virgin, which had been given by the Empress Irene to Charles the Great. The presentation is pictured in a glass window of the church of Aix-la-Chapelle. The relic became known as the Veil, or Sancta Camisia of the Virgin. Pilgrims, who were led to Chartres to see the Veil, brought offerings which enabled Bishop Gislebert to rebuild the church. In time, Chartres became the wealthiest church in France. The foundations were extended eastward beyond the Gallo-Roman town wall, and a *martyrium* was built in the crypt that the Sancta Camisia might be kept in safety, in the casket of gold

and cedar wood fashioned by the goldsmith Teudon. The sacred Veil, with its jewelled casket, was seized by the republicans during the French revolution. The casket of Teudon was lost for ever, but the greater part of the Sancta Camisia was recovered. Many sacred relics of Chartres—the head and slipper of St. Anna, the golden eagles of St. Eloi, the flagon with the blood of Thomas à Becket—are no more, but the Veil may still be seen at Chartres in its coffer of cedar wood. It recalls the part which the veneration of relics played in the building, not of one, but of most of the great minster-churches and cathedrals of Christendom. Among the lesser known tomb-shrines is the beautiful thirteenth century work which covers the body of St. Etienne in the monastery church at Aubazine, a fine brick church in the Romanesque style perched among the hills of South-west France.

After Rollo the Ganger abandoned the worship of Thor and Odin for Christianity, the cathedral at Chartres benefited by the gift of Rollo's castle of Malmaison. Thanks to such gifts Notre Dame, Chartres, was rebuilt in 962, in the Romanesque style. It also profited greatly by the religious ecstasy which accompanied the ominous year A.D. 1000. Pilgrims flocked to the *martyrium* of Chartres, to give thanks to the Holy Mother that the end of the world was not yet. But, on September 7th, 1020, another disaster came upon the foundation. The cathedral was burnt to the ground. This time it was rebuilt by the saintly and learned Fulbert, a pupil of Gerbert of Rheims, and poet, mathematician and musician, as well as leader among churchmen. For years Fulbert, as head of the school of Chartres, had made Chartres a centre of scholarship. As bishop he used his reputation to secure the funds needful if a worthy House of God was to arise on the ashes of the Romanesque cathedral. The aid of Robert of Normandy was invoked, and Fulbert secured a large yearly gift from the Duke of Aquitaine while the cathedral was rebuilding. Eudes II., Count of Chartres and Blois, and Canute of England, were other benefactors, as may be read in Cecil Headlam's charming study of Chartres in the "Mediaeval Towns Series." One winter was spent in clearing away the débris left by the fire; a year later the crypt was completed. When Fulbert died in 1028, the walls were practically finished, and the dedication of the new church took place in 1037. The enlargement and decoration under such a bishop as St. Ives occupied a great part of the next century and a half.

The stone was cut in the quarries of Berchères-l'Évêque. Robert du Mont, Abbot of St. Michel, adds his testimony to that of Brother Haimon, already quoted, regarding the popular enthusiasm which made it possible to carry out Fulbert's vast plan.

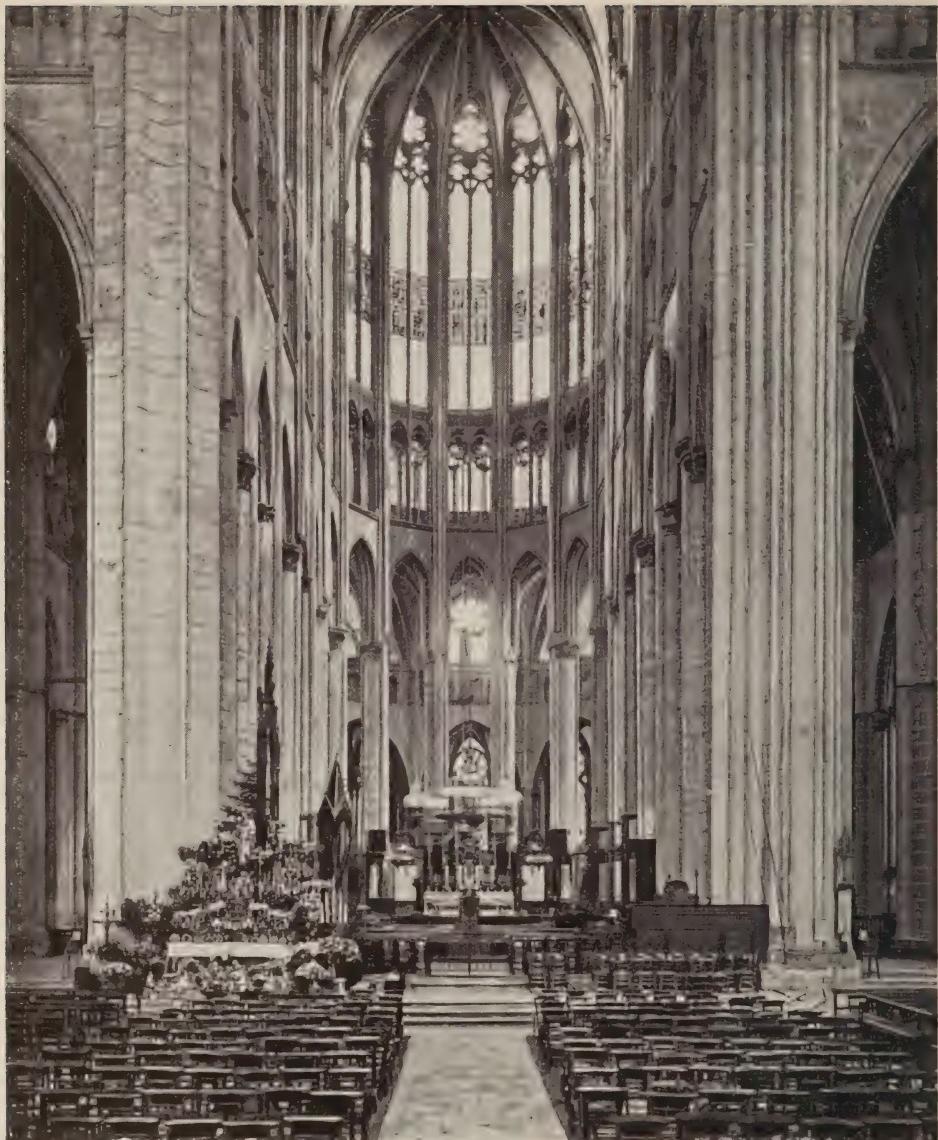
"In this same year (A.D. 1145) at Chartres men began to harness themselves to carts laden with stones and wood, corn and other things, and drag them to the site of the church. On every side you could see men and women dragging heavy loads through the marshy bogs and scourging themselves with whips."

In 1194, when the builders of Chartres were about to place the spire upon the western tower, known as the Clocher Neuf, the church of



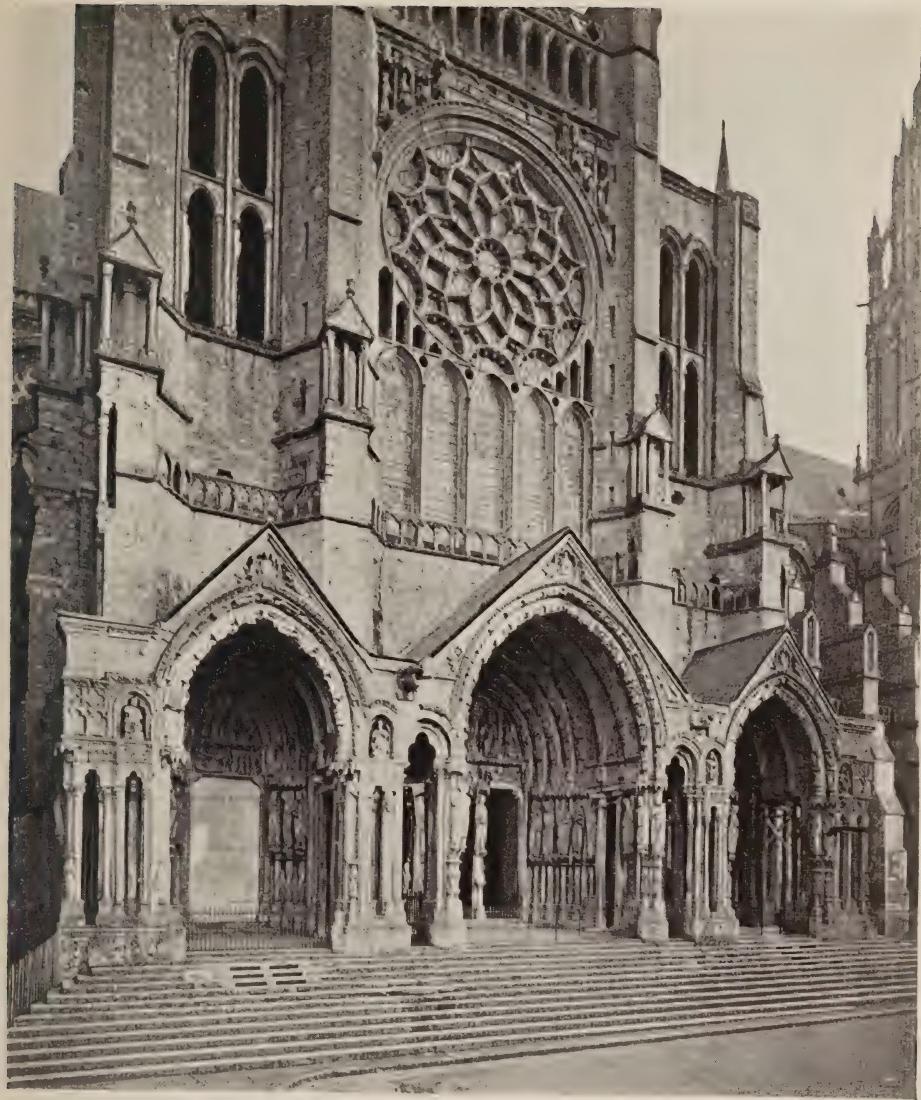
AMIENS CATHEDRAL : THE WEST FRONT

(see page 177)



N. D. photo
BEAUVAIS CATHEDRAL : THE CHOIR

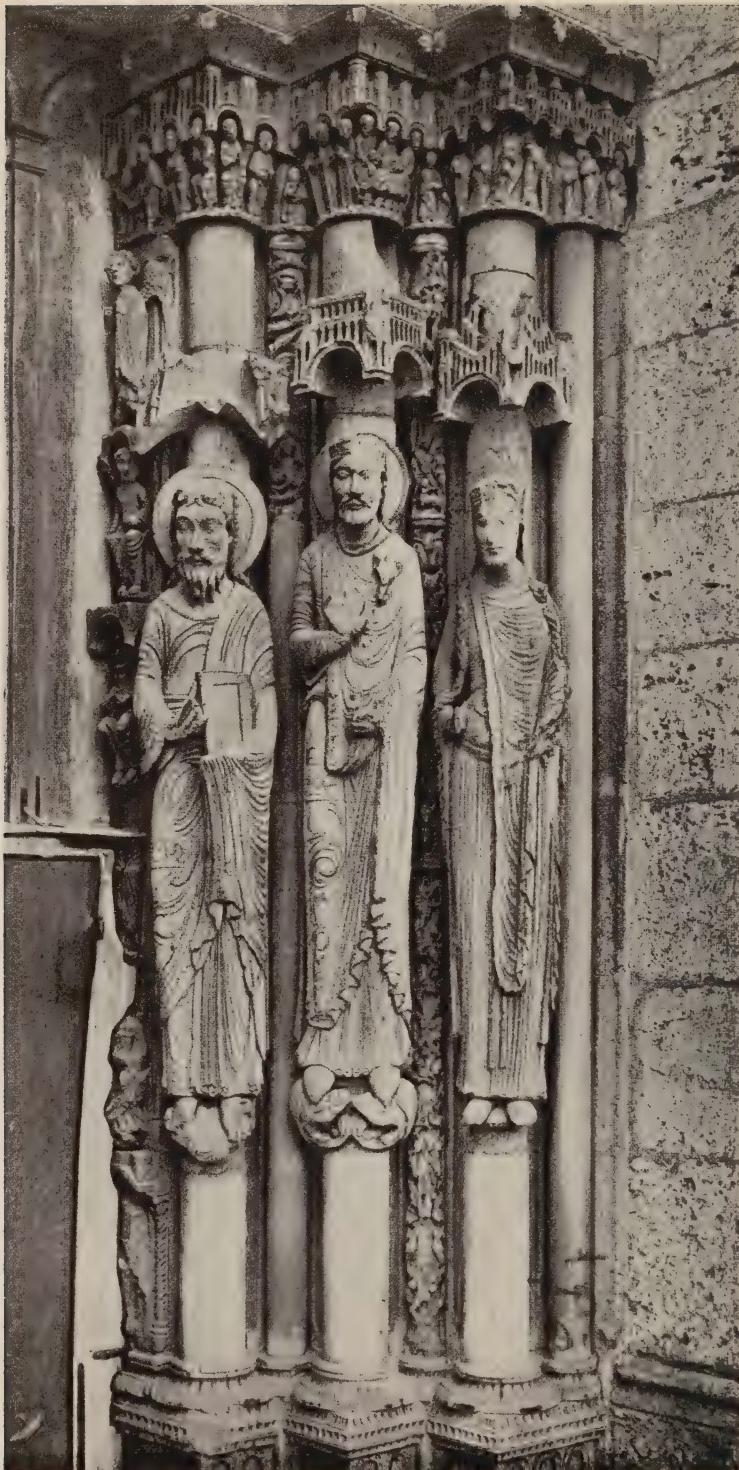
(see page 180)



CHARTRES CATHEDRAL : THE NORTH PORCH

N. D. photo

(see page 182)



N. D. photo

CHARTRES CATHEDRAL : PORTAIL ROYAL

(see page 186)

St. Fulbert and St. Ives itself was destroyed by fire. This time it was rebuilt of hewn stone as it is to be seen to-day. Much of the town was destroyed at the same time, but it was the loss of the pilgrims' church which oppressed the townfolk. Fortunately, the Veil of the Virgin in the crypt was safe. In the depths of the grotto, even the falling walls and roof had done the sacred casket no harm. Led by Mélior, the Papal legate who chanced to be in Chartres, the townsfolk made their gifts as they had done under Fulbert and St. Ives. Preachers were sent throughout Europe to collect money. Those who could not give money offered jewels ; those who could give neither gave their labour ; those who could offer neither wealth nor work gave their prayers. Richard the Lion-hearted, though at war with Philip Augustus, visited the ruins of the cathedral and saw the sacred shift of the Virgin. From near and far, the peasantry brought gifts of corn. If ever a House of God was built by the people for the people, it was Chartres.

The main body of the new church was finished by 1210. After the fire of 1194, all that remained was the narthex, with its western porch (the Porche Royal), the twelfth century windows above with their glass, and the two unfinished towers and spires which were connected with the porch during the rebuilding by lengthening the nave. The southern tower, Le Clocher Vieux, is one of the most beautiful things in architecture—the feature of Chartres which gave rise to the popular saying that a perfect cathedral would include the spire of Chartres, the nave of Amiens, the choir of Beauvais, and the porch of Rheims. In all, Chartres was to have had nine towers, but only two were completed. No great French church ever received its full complement of towers. Most of them were carried no farther than the springing of the gable. Seven towers were commenced at Laon ; three only were finished. Six towers were actually built at Rheims.

By 1230 the nave and choir of Notre Dame, Chartres, were complete, and the church was consecrated in 1260 in the presence of St. Louis. It will be seen, therefore, that the church is a work of art of the thirteenth century, due to the genius of some unknown college of architects and sculptors, probably drawn largely from the monks of Tiron and St. Père. The minster-church of St. Père at Chartres is only less wonderful in its architecture, its glass and its history, than the cathedral itself. The monkish builders and sculptors may have been assisted by a body of wandering guildsmen who had been employed on some other great church in central or Southern France. There are traces of southern feeling in Chartres. There must also have been some single genius capable of utilising team-work to the full and directing a vast weight of popular enthusiasm—bishop, mayor, master-mason or engineer. Other cathedrals were built later, but Chartres proved the possibility of expressing the myriad vitalities of a great age and making all men feel that here, in truth, was a House which brought God to earth and raised man to the gate of Heaven. Amiens was to be bigger and more varied in its decoration, Bourges more daring in design, and Beauvais, failure though it was, more astonishing in its engineering ; but Chartres is the

master-design ; it fixed the type of a vast communal and pilgrims' church.

The beauty of Chartres is sombre and brooding, not buoyant, almost blithesome, as are the more feminine graces of Amiens. The interior of Chartres is lofty, but it does not soar skyward as does its cousin at Amiens. The nave of Chartres is broad, though short in proportion to the transepts and choir. This might be expected in a pilgrims' church, where the service of the altar was of more importance than the day-to-day ministrations in the nave. The six great piers supporting the vault of the nave are alternately octagonal and round, and each is flanked by four smaller columns cut from the same block of stone. The subordinate shafts of the round column are octagonal ; those of the octagonal column are round. The capitals are carved with foliage, a reminder that the makers of Chartres had not lost all touch with the Roman building guilds. The piers of the nave bear clusters of slender pillars which carry the vault, but, at the crossing, the four great piers, which were intended to carry the central tower, rise sheer to the roof, a height of 120 feet. The apse has a double ambulatory, another feature of a pilgrims' church, from which open six chapels. A triforium with a beautiful masonry arcade runs round the whole building, while the clerestory is made up of pairs of lancet windows, with a rose window above, the three windows just filling a bay. And the glass ? A hundred and twenty-four great windows, wine-red and azure blue, in addition to half a hundred rose windows, the hues not evenly distributed, as in the glass of to-day, but various and broken like the colours of nature, complete the gracious beauty of Chartres.

Unlike the makers of Amiens and Beauvais, the builders of Chartres aimed at more than providing a support for windows of glowing glass. They never forgot that they were building with stone. They had a love for masonry, " for great rocks set one above the other." Though we are before a miracle of the mason's craft, we still seem within the realm of human activity ; the forces of gravity are recognised, and the means by which they are countered are made plain. The wondrous " folly " of Beauvais was not yet.

A Gothic cathedral had not the surface perfection of a Greek temple or a Renaissance church. It was made of building-stone. Nor did the statues which decorated its porches mimic the polished perfection of Hellenic statues. Again, their makers were concerned with stone, not with marble. Judged by Greek standards, the statuary on a Gothic church may seem rude, even " barbaric," as a Grecophile like Schopenhauer cried. The statuary at Chartres, Bourges or Rheims, like the church itself, is stone-carving and must be judged as stone-carving, it being always remembered that the mediæval colour has been lost. In the Middle Ages, the carvings on the porch of a cathedral or pilgrims' church stood out from a background of gold. The shafts were decorated with chevron patterns and the garments of saints or angels were decked with diaper. The colour not only added gaiety to the general design but protected the stone from rain and frost. It would seem that the carvings were washed with ochre, while touches of green, red or blue

paint were added, the whole being finished with gold, so that the porch of a thirteenth century church resembled a colossal painted ivory triptych, as Mr. Lethaby has said. Early Gothic carvers had only an elementary knowledge of human anatomy, but they had the all-essential insight into the fundamentals of their art. This insight told them that their carved figures were part of a building for the use of man, not a shrine to be gazed upon as had been the Parthenon at Athens, or the Temple of Zeus at Olympia. Gothic sculpture was architectural ; its makers worked on the porch itself, as at Vezelay, or cut their figures in a quarry-workshop near by, as at Chartres. Religious sculpture lost this outstanding merit when the sculptors of the Renaissance supplied churches with statuary, much as a church is supplied with a factory-made lectern to-day. In losing its architectural quality, it lost its chief charm. Like the lines and masses of the interior, the stone on a porch at Chartres was vitalised without losing its stony nature.

This gives a clue to the beauty of the west front at Chartres, the triple porch which was built for the twelfth century church of Fulbert and St. Ives, and not for the church which arose after the fire of 1194. Being the chief entrance, the builders of Chartres determined that the western portal should be, indeed, a doorway to the House of God, an expression of the place of pilgrimage within.

It has been said of these Gothic porches that they were "scooped into the depth and darkness of Elijah's cave at Horeb." Their purpose was mystical, not mere decoration. Consequently, their builders used symbolism rather than realism to achieve their mystic end. All Gothic sculpture was in a measure symbolical, but the predominance of symbolism gives peculiar character to late Romanesque, as compared with the Gothic sculpture proper of the thirteenth century. A Romanesque figure at Chartres, or Bourges, has spiritual vitality and architectural rightness, whereas the thirteenth or fourteenth century Gothic figures have a richer grace and naturalness. The Romanesque Christ is an image of divinity ; the Gothic Christ is the Man who called little children to come unto Him and forbade them not ; the Romanesque sculptor showed the Saviour upon a jewelled cross, crowned and triumphant ; the later Gothic artist, less insistent upon doctrine, showed the God-Man on the Cross, with stricken form and eyes weary with pain, appealing to the emotions of the man or woman who gazed, rather than of the believer who could accept the symbol for the fact.

But Gothic sculpture was more than symbolism and more than representation. As a whole it made up the picture book of the Faithful, summing up the science, history and dogma of the Church for a people who learnt by the eye rather than the ear, and understood men and actions better than words. Sculpture and painting between 1150 and 1350 were a form of the liturgy, as M. Emile Mâle has shown in his remarkable study of Gothic sculpture, *Religious Art in France in the Thirteenth Century*. He shows that it was not the choice of individual sculptors but corporate Christian consciousness which dictated the decoration of a Gothic porch. The learning of a thousand years was summed up in the three great doorways of Chartres, as it was in the

glass of the nave and choir, painters and sculptors recalling, by symbol or by fact, all the Law, the Prophets and the Gospel. The windows of Chartres have a material beauty as sources of jewelled light, but it is no less important to regard mediæval glass and statuary as an embodiment of the doctrinal and historical knowledge collected by Christendom in the thousand years following the downfall of the Western Roman Empire.

Moreover, the carvings and windows of a great Gothic church not only represented knowledge but ordered knowledge ; not only Bible story but theology. This is well shown in the three porches at Chartres, where the sculptors have manifestly followed the liturgy of the Church rather than the Bible narrative, and have only carved subjects actually included in the Church calendar. The apocryphal gospels are freely used, as in the story of Joachim and Anna, and also the life-stories of local saints. In the south porch the saints are shown in the order prescribed in the litanies used in the diocese of Chartres. The designers of the porches even sought order from that "devourer of books," Vincent of Beauvais, to such an extent that M. Mâle utilises the divisions suggested by Vincent and sums up his study of Gothic sculpture under four heads—the Mirror of Nature, covering Natural History and the Story of the Creation ; the Mirror of Instruction, dealing with the Fall of Man, the Mirror of Morals and the Mirror of History. The mediæval sense of order is shown in the way scenes and figures from the Old Testament are set side by side with scenes and figures from the New Testament, so as to bring out the mystic harmony underlying the two forms of divine revelation. Twelve patriarchs and twelve prophets are contrasted with the twelve apostles ; Isaiah, Ezekiel, Daniel and Jeremiah with Matthew, John, Mark and Luke, so that the prophets are sometimes actually carved bearing the evangelists upon their shoulders. In his *City of God*, Augustine had said : "The Old Testament is nothing but the New covered with a veil ; the New is nothing but the Old unveiled." The builders of the porches at Chartres did not forget this. Their meaning was made the plainer by lettered scrolls in the hands of some of the figures, many of the inscriptions upon which were taken from St. Augustine's *Contra Judæos*, sentences from which were recited at Matins and on Christmas Day. The painted lettering has in most cases disappeared. On either side of the central doorway in the west porch are the ancestors of Christ, as set out in the first chapter of St. Matthew. This genealogy was read in church on Christmas Eve, and certain mystery-plays began with a procession of Christ's ancestors, so that the subjects were familiar. Human life, too, is divided into seven ages, each associated with its appropriate virtue, while the grace necessary for the practice of such virtue is indicated by one of the seven petitions of the Paternoster. The seven sacraments, moreover, sustain man and guard him from the seven deadly sins.

If there was careful selection in the themes represented in a single porch, similar care was exercised that theology, liturgy and morality might each have due illustration in some part of a great church. The north, as the region of cold and darkness, was usually given over to

Old Testament figures ; the south, bathed in sunlight, was the region of New Testament revelation. The west, where the sun set, was the region of death, and was consequently devoted to the Last Judgment.

At Chartres this is not so. In the western porch the Triumph of Christ is shown. Standing between two angels, He says to the righteous, "Come, ye blessed of My father," and to the unrighteous, "Depart from Me, ye who work iniquity." Four other angels amid the clouds are heavenly messengers calling the elect from the four quarters of the earth. Below sit the apostles in judgment upon the twelve tribes of Israel. Carved upon the orders which surround the central tympanum are the signs of the Zodiac and the months. There are five almanacs of this kind at Chartres. In the tympanum of the doorway on the right, the Virgin Mother sits crowned ; below are scenes from her life, and above, in the vaulting, are the Seven Liberal Arts of the Trivium and Quadrivium. Music with Pythagoras below, Dialectic with Aristotle, Rhetoric with Cicero, Geometry with Euclid, Arithmetic with Nichomachus, Astronomy with Ptolemy, and Grammar with Priscian, the whole summing up the knowledge with which the Virgin Mother was gifted.

" Little children, here ye may lere
 Much courtesy that is written here ;
 For clerks that the seven arts cunne
 Seyn that courtesy from heaven come,
 When Gabriel our Lady grette
 And Elizabeth with Mary mette."

The north porch at Chartres was commenced about 1245 and was completed about 1270. It belongs to an age in which the sculpture was more mature than that of the west front. There are 705 figures in the porch, and the forms are well proportioned and the draperies graceful, but the statuary has less individuality than that of the earlier age, and harmonises less happily with its architectural surroundings. The human form is no longer conventionalised into a column, that it may be fitted to bear an order of the vault above.

As the theme of the west porch is the Glory of Christ, so that of the north porch is the Glory of Mary and her mother Anna, whose relics were among the most honoured possessions of Chartres. For this reason St. Anna, rather than the Virgin, has the place of honour on the pier of the central doorway. In the tympanum above is carved in high relief the Coronation of the Virgin. Twelve angels and twelve prophets occupy the first two orders of the vault, the third and fourth orders being devoted to ancestors of Mary, branches of Jesse's stem. The glorification of the Virgin assumed a new importance in Catholic doctrine and ritual in the thirteenth century, hence the statuary lavished in her honour. On either side of the central doorway are ten life-sized statues of Bible personages whose lives or words had prefigured the coming of Christ. They are Melchizedek, Abraham, Moses, Samuel and David on the one side, and Isaiah, Jeremiah, Simeon, St. John the Baptist and St. Peter on the other. In the left bay of the north porch

is yet another series of carvings illustrating the Virgin's life and virtues. The tympanum pictures the Birth of Christ, while, above, is a battle of the virtues and vices, emblematic of the perfect life of the Mother of the Saviour. The details are taken from Prudentius. On the right are represented the four cardinal virtues and their opposite vices. Prudence with an open book treading down Folly; Justice with sword and scales, Strength and Cowardice, Temperance and Lust. On the left are the three theological virtues with their contraries, Faith, with Infidelity; Hope with Despair; and Charity with Avarice. To balance the four virtues on the other side, Humility and Pride have been added. Lastly, in the fourth order, are twelve queens with scrolls which once bore their names—the Fruits of the Holy Spirit, set out by St. Paul in the 5th Chapter of Galatians. The statuary of the right-hand bay, on the other side of the central doorway, is devoted to Old Testament personages who foretold the Messiah and the Holy Virgin, such as Balaam, the Queen of Sheba and Joseph, a prototype of Jesus by reason of his persecution, his captivity and his deliverance of Israel. In the tympanum are carvings showing the trials of Job and the Judgment of Solomon.

At first sight the sculpture on the south porch would seem to be akin to the triumph of Christ on the west porch. It is, however, concerned with the Last Judgment and the martyrs, saints and confessors popularly associated with the Last Judgment. More naturally, the northern or western porches would have been devoted to this theme, but the statuary around the northern entrance illustrates a local theme, the story of St. Anna, a special circumstance due to the cathedral numbering among its relics the head of St. Anna, which was brought from Constantinople in 1205. The south porch was built in 1245 and the sculpture was completed by about 1280. In the central bay is depicted the Last Judgment, the left bay being devoted to the martyrs and the right bay to the confessors. In the central tympanum, Christ enthroned shows His wounds, the Virgin standing on the one hand, and St. John on the other, while six angels bear the instruments of the Passion. In the lintel is the Archangel Michael with the scales, while Good Deeds and Bad Deeds, a dwarf-like figure with an ugly face, are on the other side. The dead awaken for judgment in the presence of the twelve apostles, the Judges of the Twelve Tribes, as recorded in Matthew xix, 28. In the arch above the tympanum are nine choirs of angels, together with twenty-eight prophets and twenty-four elders, the latter in relief on the pillars of the bay. An angel carries a soul to Abraham's bosom, while other angels crown the blessed, who look to the Saviour with clasped hands. In the group of the damned, Satan is represented as the Leviathan of the Book of Job, a flame going out of his mouth. One devil bears a soul on his back, while another thrusts a soul into hell with his foot. Yet another devil leads a lady of rank to her doom, while the fourth has charge of a miser with his money-bags and a fifth drags along a woman, head downwards. Lovers of Chartres are under a debt of gratitude to M. Houvet for his remarkable portfolios of photographs, covering the statuary and glass of the Cathedral in full detail. The portfolios constitute the most detailed study of a French

cathedral available to students, and their worth was publicly recognised when M. Houvet's work was crowned by the Academie des Beaux Arts.

All the portals of a great Gothic church were furnished with heroic statues of saints, martyrs or ancestors of Christ, some of which have a majesty of pose and a grace of drapery which we are apt to associate only with great Greek sculpture. But perhaps the most characteristic carvings of a Gothic cathedral—most characteristic because most democratic—are those which testify to that part of human nature which derives from Caliban rather than from Christ. The grotesque is as typical of the drama of Gothic architecture as the spiritual. The Gothic craftsman was at no pains to hide his weakness. It was his fortune to pay homage to One who could understand weakness and strength alike. At times men and women of the modern world may smile; but, in the end, we also worship in the shrine which Gothic faith created. The sculptor had a joy in carving his comic devils. He added a lampoon to a church porch much as the men of to-day send a political caricature to a comic paper. M. Mâle recalls that, in "Dante's Hell," there was a circle for "those who were sullen in the sweet air, that is gladdened by the sun." An age which had fair joy in laughter could not deny an artist his jest, bitter or sweet as the occasion demanded. The architectural purpose of a gargoyle was to carry the rain water clear of the masonry. Consequently, the Gothic imagination visioned the gargoyle as a creature all mouth and throat. The gargoyle witnesses to the truth that the earthly origin of man is not incompatible with the divinity of God. If the Gothic builders raised man Heavenward, amid the soaring piers of the interior and under the glow of the be-jewelled windows, they also brought God to earth amid the carvings of the western face and the transept porches.

The enthusiasm of the French Communes did not suffice to complete the larger cathedrals. Bourges was not finished as its designers intended. Beauvais is only a hint of what it might have been. No French cathedral received its full complement of seven or nine towers. After 1250, progress was only made by utilising the enthusiasm of the guilds. Each trade in a town desired a chapel dedicated to its own saint. In the fourteenth century fresh funds were forthcoming to build these chapels between the buttresses of the nave in the great cathedrals. Finally, during the Hundred Years War with England, between 1338 and 1453, France stopped building. When the war ended French builders had to learn their craft afresh. What work was done in the churches and cathedrals was by individuals, rather than by the communal effort which built Chartres, Amiens and Rheims. The Gothic era had ended.

CHAPTER XII

NORMAN ARCHITECTURE IN ENGLAND

The structural problems involved in Gothic architecture must necessarily be illustrated by the achievements of the master-builders of Northern France. Nevertheless, many details are revealed by tracing the more ordered development of church building in England. At no time did English builders face the structural problems implicit in Gothic architecture with the courage of their French rivals. Not being pricked on by a passionate desire for the sublimity of height, they were content with beauty of detail and perfection of finish, where the French sought the pulsing emotion expressed by soaring piers and deep vaulting. For the English master-mason a stone vault was a method for protecting his building from fire rather than a source of æsthetic emotion. The flying buttress was not exploited in English Gothic because the tradition of thick walls established by the Norman builders persisted. The French architect, with a deeper insight into structure, noted that ribbed vaulting brought the stresses to particular points, and felt that it was fitting that these points should be specially marked and strengthened.

The chevet, too, that beautiful development of the apse, which became so characteristic of French Gothic in its prime, was not popular in England. English ecclesiastics insisted upon the eastern orientation of their chapels, which was impossible in an elaborate French chevet, such as the east end of Le Mans Cathedral, with its thirteen chapels. Instead, English church builders preferred a square-headed apse. Numerous altars were common in an English cathedral, but they were distributed through the church. At Salisbury there were twenty or more altars, six in the western transepts, four in the smaller eastern transepts, two in the nave and five in the sanctuary, ambulatory and Lady Chapel. The French architect, however, was quicker to see how the needs of worship could be made to serve an architectural purpose, and he made the chevet at once a thing of beauty and utility. In the same way the double aisle was exploited in France much more freely than in England, and the French architect linked the aisles of the choir up with the ambulatory with beautiful logic. The veneration of relics was observed in both countries, but it had more effect upon the basic plan of a pilgrim church in France than in England.

Perhaps the chief reason for the richer content and fuller development of French Gothic may be found in the fact that a great French church was usually built for townsfolk, whereas the majority of English cathedrals arose in the quiet of the countryside or, at any rate, in the

peace of a cathedral close. The English church was not specially designed to make its presence felt among hundreds of houses. Lanfranc, the first of the great Norman builders, was deeply obsessed by the monkish ideals which he had absorbed at Bec and Caen. Lanfranc not only permitted monastic chapters to conduct services in episcopal churches, but allowed secular canons to be dispossessed by monks. Some of the most famous cathedral churches in England were monastic in origin. Winchester, Gloucester, Durham, Norwich and Peterborough were originally Benedictine abbey churches. They were preserved because neighbouring bishops chanced to have their episcopal seats in the church of a great monastery. In France, the greater cathedrals were communal churches in towns whose histories went back to Roman times. An English cathedral indeed served three, and even four purposes. The eastern transept and choir constituted the monks' church, with the shrine of the local saint, while the nave and western transept served as a parish church, and a gathering place of the pilgrims who came to view the relics. In no fewer than 119 Benedictine churches the nave or an aisle served as a parish church, Sherborne Minster being an example. So did many naves built for the Austin Canons, among them the nave of Dorchester church. It would have been strange if some loss of logic in planning and decoration had not resulted from this division of purpose. Nevertheless, English Gothic developed characteristics of its own, which are full as worthy of study as the achievements of the builders of France.

On entering an Early English church such as Wells, Lincoln and Salisbury, the general impression is that the banded shafts of stone or Purbeck marble are cut off from the triforium and vault. The eye is drawn eastward. French Gothic, on the contrary, is a style of soaring-arches, reaching up to a roof, vaulted above windows of coloured light. In this lies the difference between English and French Gothic. The French made its bolder appeal to the emotion of the worshipper, while the English led the imagination to the central "Mystery of the Faith" enshrined in the altar. Pier-shafts, the moulding of arches and windows, the carving of capitals, corbels and dripstones, suggest that the English mason had found a new and native joy.

Before the Norman Conquest, England was a poor country and away from the centre of European ideas. In the 150 years following the invasion of William I., however, it shared in all the great movements which were stirring the western world, including the growth of towns, the struggle for communal liberty, the efforts of the Catholic Church for political power, and the Crusades. As the chief organising factor after the monarchy, and far more potent than the monarchy in all matters of art and culture, the Church was the first among English institutions to profit by the great changes consequent upon the Norman invasion. French bishops, familiar with the Romanesque churches arising on the Continent under the influence of the Cluniacs, were appointed to English Sees. Their first thought was to rebuild their cathedrals in the new style. In the villages Norman nobles built stone churches in place of the earlier thatched shrines of wood. William of

Malmesbury records that a rich Norman would have considered that he had lived in vain if he left no monument of his piety behind him.

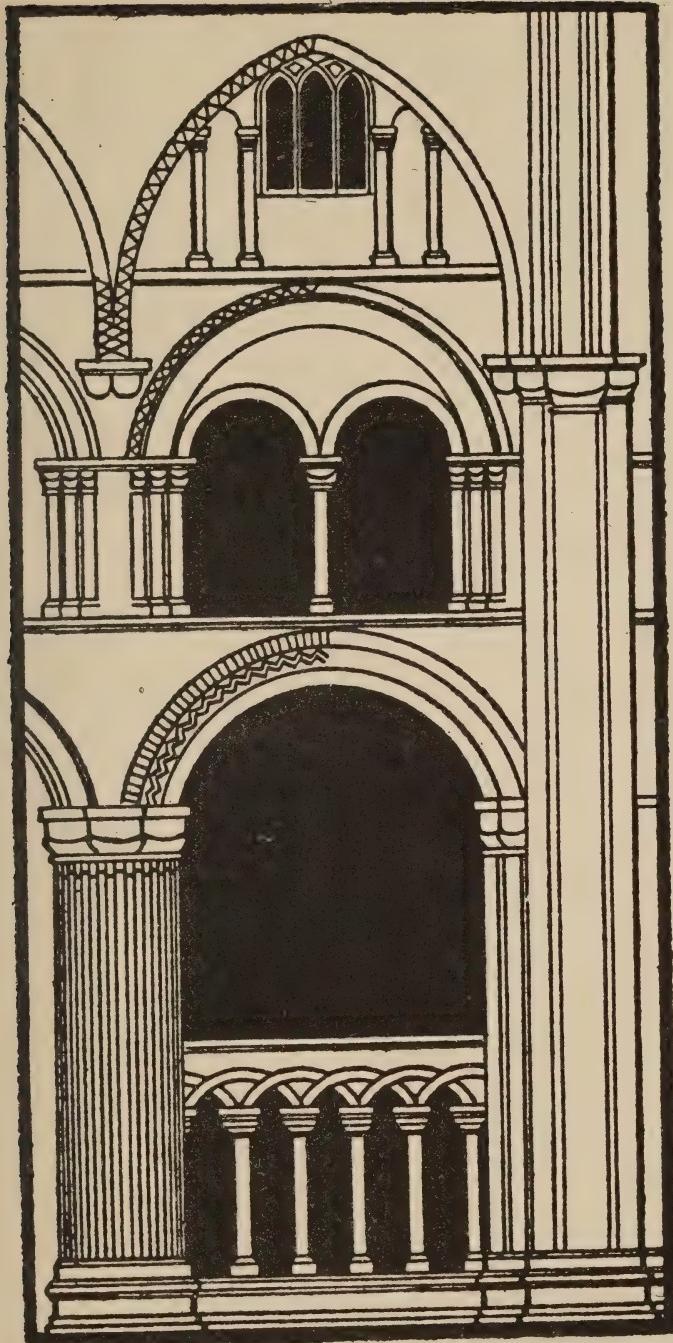
During the reigns of William the Conqueror, William Rufus and Henry I., almost every cathedral church was rebuilt from its foundations. The principle generally followed was to rebuild in sections from the east end, using the nave as a church while the choir was being built. When the choir had been dedicated, the builders set to work to demolish and rebuild the nave. Then a Lady Chapel or chapels around the apse were added. Much of the building was poor and was probably done by English workers with some supervision from Norman master-masons. Gundulph, Bishop of Rochester, was famous as a builder in the time of William the Conqueror. He was responsible for the Keep in the Tower of London, with its tiny Norman chapel, a very perfect example of the early Norman style. The plan includes a nave with narrow aisles ; the pillars are massive and short and the capitals have little ornamentation, while the nave has plain barrel-vaults.

A cruciform shape, with a low tower at the intersection of the nave, choir and transepts, was a feature of the larger Norman churches. The choir was generally short and often had a semi-circular apse at the east end. In the apse was the bishop's seat. A short choir of four bays was deemed sufficient for the drama of the Mass, the *chorus cantorum* having their place beneath the central tower. The unbroken nave, sometimes 250 feet long, was roofed with painted wood, while the thick Norman walls were composed of rubble and mortar, faced with cut stone. The columns, too, had cores of rubble and were only faced with hewn masonry (ashlar). Hence their apparent strength but innate weakness. The early Norman builders were aware of the shortcomings of their material, and accordingly stone vaulting and large windows were not popular.

In London, the earlier Norman style is happily represented by the church of St. Bartholomew, built about fifty years after the Conquest, in the Smooth Field (Smithfield), just outside London Wall, between New Gate and Aldersgate. Its story serves to illustrate the circumstances under which many twelfth century foundations came into being.

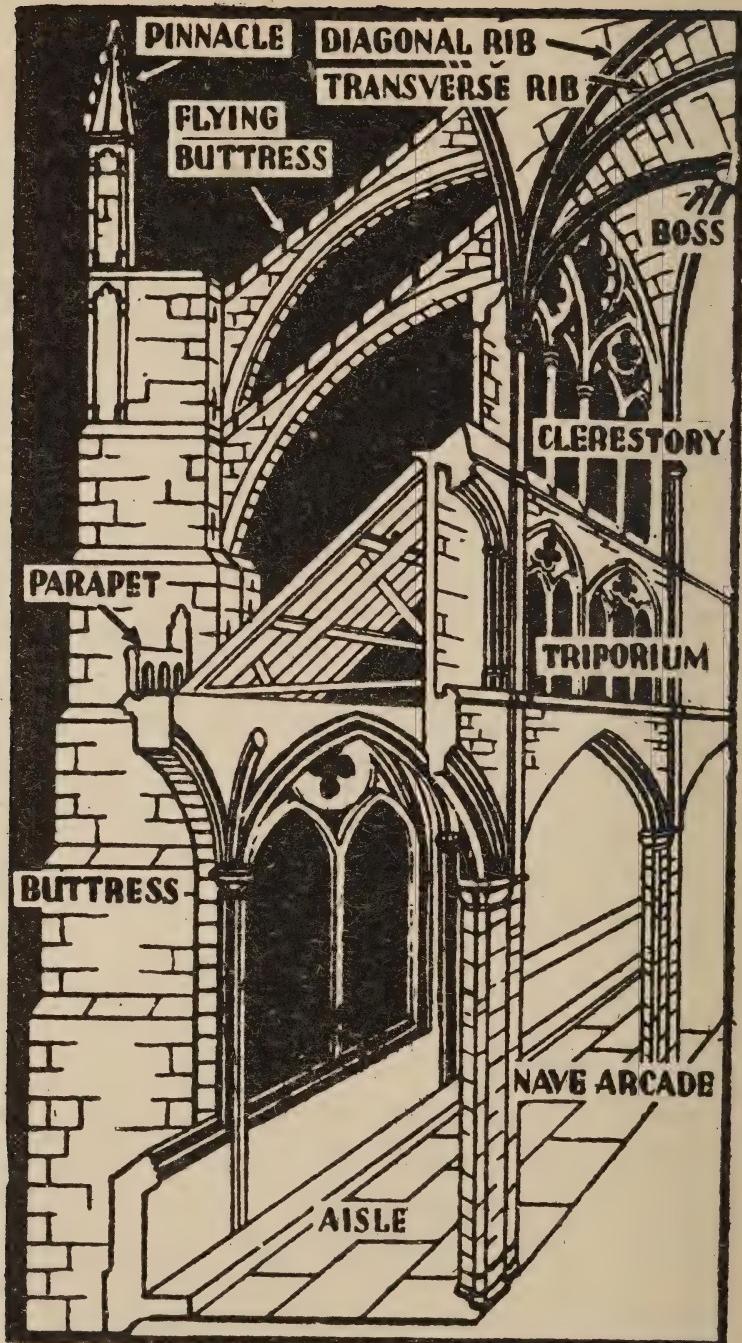
The priory of St. Bartholomew belonged to the Augustine (Austin) canons, known as the Black Canons owing to the black cassock, cloak and hood, the last two worn over a white embroidered rochet. The order was monastic and arose from a desire among the secular canons to bring themselves under corporate discipline. The first London foundation was Holy Trinity, Aldgate ; the second, the priory of St. Bartholomew, was founded by Rahere, a witty courtier of Henry I. *The Book of the Foundation of St. Bartholomew's Church*, in the Cottonian collection, tells that when Rahere attained "the flower of youth, he began to haunt the households of noblemen and the palaces of princes where, under every elbow, he spread cushions for the great men, with apings and flatterings, delectably anointing their eyes to draw to him their friendships."

If monkish legend be accurate, Rahere's capacity for friendship was to serve the Austin Canons well. He became a Canon of St. Paul's and,



NORMAN STYLE

(see page 190)



STRUCTURE IN THE GOTHIC STYLE

(see page 202)

in 1120, when visiting the scene of St. Paul's martyrdom at the Three Fountains near Rome, was stricken with malaria. Rahere vowed to found a hospital for the poor of London if he recovered. A few days later the sick man had a remarkable vision. A winged beast with eight feet seized him and carried him aloft, whence he threatened to drop Rahere into a deep pit. The Canon's cry for aid was answered by one who said :

" I am Bartholomew, the Apostle of Christ, that is come to succour thee in thine anguish and to open to thee the sacred mysteries of Heaven. Know, therefore, that it is the will of Heaven that thou shouldest choose a place in the suburbs of London, at Smithfield, and there build a church and hospital, and this thou must do in my name."

Having been received into the Order of the Canons Regular of St. Augustine, Rahere returned to London. He sought the help of Bishop Richard de Beaumeis, himself a builder, and through the bishop secured a grant of waste land in West Smithfield. The church was founded in 1123. Then Rahere built the hospital, a long lofty hall with aisles on either side ; the beds of the women patients being on one side, those of the men on the other. Later, a cloister, chapter-house and other monastic buildings arose around the church. South of the church and north of the buildings were a mulberry garden and a cemetery for the canons.

Most of the nave of the monastic church was destroyed after the Reformation, but the Norman choir has been preserved as a parish church. The columns were circular, with short solid-cushioned capitals, with a triforium above, each arch including four smaller arches and a broad tympanum. Above was a flat painted wooden roof, like that in the nave of Peterborough cathedral. Behind the altar was an apse and ambulatory. The bare grey walls of St. Bartholomew's to-day give no real idea of the church as it was when the Austin Canons were at the height of their influence and wealth. Imagination must add the embroidered hangings, the wall paintings, the gilded and coloured mouldings of the columns, images over a score of shrines, finely-wrought lamps hanging from the roof, a pavement of multi-tone tiles and the radiant beauty of the windows. The beams of the roof were covered with chevrons and scrolls in rich pigments and dulled gold leaf. The whole made up the most complex harmony of beautiful things ever attempted by an age of artists. To-day, the painter, the sculptor, the goldsmith, the tapestry worker, the glass worker and the architect work alone, with little heed for their brother artists. In the Gothic age, a harmony was reached because every worker felt that, though he had freedom within the limits of his own craft, far above personal reputation was the joy of helping to make perfect a House of God.

Then, as now, a central feature in the church was the tomb of Rahere. He lies, with shaven crown, in the habit of his Order, under a vaulted canopy with tabernacle work of the fifteenth century. The inscription reads :

*" Hic jacet Raherus primus canonicus
et primus prior hujus ecclesiæ."*

A crowned angel at the feet of Rahere holds a shield bearing the arms of the Priory, doubtless added in the fifteenth century. More in the spirit of the twelfth century are the two small kneeling monks, bearing Latin bibles open at the 51st chapter of Isaiah. The passage recalls the original wilderness of the Smooth Field and the work that many a monastic house was doing for civilisation in those times :

" For the Lord shall comfort Zion. He will comfort all her waste places and He will make her wilderness like Eden and her desert like the garden of the Lord."

Inspired by the corporate pride aroused in such a monastery as St. Bartholomew's, Smithfield, hundreds of similar foundations were created in the twelfth century. For a hundred years the English builders perfected their craft. Instead of coarsely-hewn stones, with mortar joints, surfaces were carefully finished and the stones were accurately fitted. Fine-jointed masonry replaced the earlier wide-jointed work, in which the joints between the stones were filled with a thickness of mortar. In the transept at Winchester, is a spot where the wide-jointed work and the fine-jointed work can be seen side by side. William of Malmesbury, speaking of churches put up by Roger, Bishop of Salisbury records that " he put up great buildings at vast cost and of surpassing beauty, the courses of the stone being so correctly laid that the joint deceives the eye and leads it to think that the whole wall is made of a single block." In the same century, chisel-carving superseded the earlier axe-carving, as may be seen in an arcade at Canterbury, where the junction of the axe and chisel-carving chances to have been preserved. The monk Gervase, writing of the rebuilding of Canterbury Cathedral, tells that in the old capitals the work was plain or sculptured with an axe ; in the new ones the work was exquisite with carving and worked with a chisel. At the same time, the carving of the softer stones became less shallow, and therefore more ornamental.

After the end of the eleventh century, the larger churches were no longer built by local labour. A craft of trained masons and carvers had established itself, which supplied bodies of workers when they were required. The work of the early Norman builders can best be studied at Durham, where the relics of St. Cuthbert and St. Oswald had made " The White Church " of Bishop Aldhun a centre of faith from the Tees to the Firth of Forth. When William of St. Carileph was appointed bishop by William the Conqueror, he not only substituted Benedictine monks from Jarrow for the secular priests who served the White Church, but laid the foundations of a new cathedral in the Norman style. Carileph's work was continued by Ralph Flambard and, in 1104, Cuthbert's body was enshrined in the new church. The vaulting of the nave was finished about 1130, but the ribbed vaulting of the aisles seems to date from the last years of the eleventh century. The nave is supported by alternate piers and columns in the massive Norman style, which are

redeemed from any suggestion of heaviness by the proportions of the parts. The height from the pavement to the top of the nave arches is considerably more than the combined height of the triforium and clerestory, and yet it is not so great that it reduces the upper stories to insignificance, as in the nave at Gloucester. The drums of the columns are ornamented with channels cut on the faces, some spiral, some zigzag, some trellis pattern, the capitals being decorated with octagonal cushions. The lighter and more graceful forms of Norman work which developed in the twelfth century can be studied in the Galilee chapel, built about 1175, at the west end of Durham cathedral. Owing to a curious tradition which has not yet been explained, no woman was allowed to enter the cathedral of St. Cuthbert or, indeed, any church in which the saint's body had rested. When architectural difficulties prevented Bishop Pudsey building a Lady Chapel at the east end of the church, he built a "Galilee Chapel" at the west end, into which women might lawfully enter, so that "they who had not bodily access to the secret things of the holy place might have some solace from the contemplation of them." (Geoffrey de Coldingham.) Bishop Pudsey's chapel consists of five aisles, the roof rising from elaborately carved semi-circular arches, which were, at one time, coloured with fresco. In the chapel is the tomb of the Venerable Bede, which was brought to Durham from Jarrow in the eleventh century. Architecturally, the addition of the low chapel gives scale to the west front of the cathedral, with its massive western towers.

These developments of planning and building-craft were accompanied by corresponding changes in the decoration and sculpture of a Norman House of God. In the smaller churches of Saxon times a single slab of stone had served as the lintel of a doorway. When imposing processional entrances were required, arch construction developed, if only because an arch is built from numerous stones and thus permits of a much larger doorway than is possible when the size of the entrance depends upon a single lintel stone. Doorways, which had not been recessed at all, were decorated with two, three and more "orders," and clustered piers were devised instead of double columns. The advantage of a pier is plain, inasmuch as the arch harmonised with its support in a way which would not have been possible if two columns were joined to an arch with several members.

Norman piers and arches were decorated with carved mouldings, among them the chevron or zigzag, the star, the billet, the lozenge, and the abacus and string. There are beautiful examples at Iffley, two miles from Oxford, where may be seen a Norman parish church in its most perfect form. Iffley church was built about A.D. 1160, and the west front includes a deeply recessed doorway with richly carved chevron and beak mouldings. Above is a circular window, 30 feet in circumference, with chevron mouldings.

At the end of the Norman period, decoration became so profuse that the great south door of Malmesbury Abbey was possible, with no less than eight concentric arches recessed one within the other, the whole portal being covered with decorative mouldings and sculpture. The

fame of Malmesbury was established by St. Aldhelm, a youth of royal blood who became Bishop of Sherborne. Aldhelm himself attended the Witenagemot called to choose a new bishop, and when he was nominated pleaded, "I am old, I need rest." The memorable reply was, "The older, the wiser and the fitter." Aldhelm died at Doulting in Somersetshire, where he was carried into the little wooden church and, seated on a stone, passed peacefully away. The fame of his piety and scholarship persisted, and about 837 King Ethelwulf built a costly shrine at Malmesbury for the Aldhelm relics. Pilgrims visited the place in such numbers that there were times when a troop of cavalry was necessary to control the crowd. This Saxon church lasted until 1142, when the monks rebuilt the nave in the Norman style.

There is no better example of the transition from the non-representational method of the Saxon period to the full-representational craft of the Gothic age than this south porch at Malmesbury. In a sense the figure work is an intrusion upon the natural Anglo-Norman outlook, but, if so, it was part of the price paid for Roman Christianity. If decoration had been the only aim, there would have been no necessity for figure carving. But the makers of the south porch at Malmesbury wished also to instruct the faithful by picturing Holy Writ from Genesis to the end of the gospel story. The semi-circular tympanum which fills the head of the arch is carved with a representation of Christ seated in glory in the mystical Vesica, an emblem recalling a similar carving above the Prior's door at Ely, in allusion to His own words :

"I am the door, by me, if any enter in, he shall be saved."

Near this representation of Christ in Glory are the twelve apostles, as the judges of the twelve tribes of Israel. Most of the orders on the recessed archway are decorated with foliage or conventional designs, but there are a number of medallions with figures which definitely suggest the transition to Gothic sculpture, such as we have seen at Bourges, Rheims and Chartres. Here we may see the final effort to put aside the non-representational methods of decoration which arose among the pastoral wanderers of the steppes, but did not serve the ends of a Christian carver in the twelfth century A.D. There is rude power in this Norman sculpture rather than grace, but it never lacks significance. Always, the figures mean something, as we see in the western doorway of Lincoln cathedral, also decorated with occasional figure work, including the eager archer who strains hand and head to the string that the shaft may carry aright. Three of the recessed *orders* at Malmesbury contain medallions carved with Bible stories. On the first twenty-eight, subjects were cut recalling the story of the Creation as told in Genesis. A bare list will suggest how the Norman sculptors combined instruction with architectural effectiveness (shown on opposite page).

The medallions on the second of the figured mouldings deal with the punishment of Cain, Noah and the Ark, Abraham's Sacrifice, the story of Moses, Samson—a type of Christ breaking the gates of the tomb—and the story of David. The third order is carved with New Testament episodes and personalities, among them John the Baptist, Mary and the



DURHAM CATHEDRAL: THE NAVE

Mansell

(see page 195)



CANTERBURY CATHEDRAL : THE CHOIR

Mansell

(see page 206)



S. Smith

LINCOLN CATHEDRAL : THE ANGEL CHOIR

(see page 210)



EXETER CATHEDRAL : THE NAVE

Mansell

(see page 219)

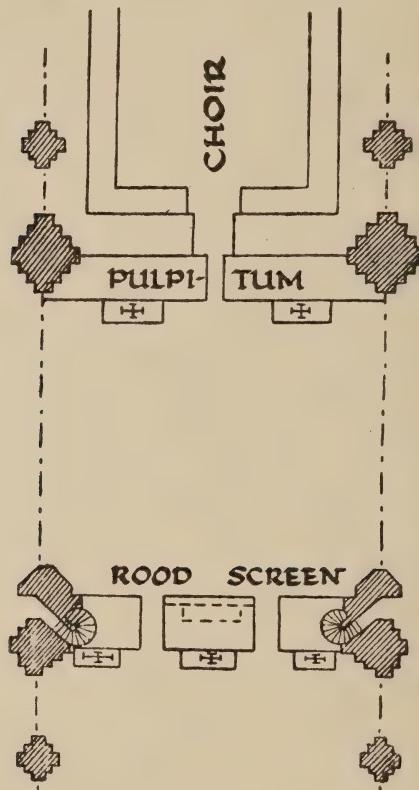
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| (1) Defaced. | (14) Adam and Eve hide. |
| (2) Coming of Light. | (15) God calls. |
| (3) Creation of Sea. | (16) Dismissal from Eden. |
| (4) The Lord beholds. | (17) Gift of Spade and Distaff. |
| (5) The Lord makes fowls. | (18) Adam digs ; Eve spins. |
| (6) He makes fishes. | (19) Birth of Cain. |
| (7) He makes beasts. | (20) Cain tills. |
| (8) The Spirit on the waters. | (21) The Angel Keepers. |
| (9) Adam. | (22) The Angel Keepers. |
| (10) Eve. | (23) Abel in fields. |
| (11) Paradise. | (24) Cain meets Abel. |
| (12) Adam in Paradise. | (25) Death of Abel. |
| (13) Eve and Satan. | (26, 27, 28) Defaced. |

Archangel, the birth of Christ, the flight into Egypt, the cursing of the fig tree, the Passover supper, the Crucifixion, the Burial, the Resurrection, the Ascension, the overthrow of Satan by Michael, and the mourning of Mary.

Durham and Malmesbury were Benedictine buildings. During the tenth and eleventh centuries the influence of the Benedictines upon church planning and building was all-important, but, as the twelfth century progressed, the influence of the Cistercian monks asserted itself. These accepted the ideals of the austere Bernard of Clairvaux. Whereas Benedictine abbeys were frequently in centres of considerable population owing to towns arising around the original monastic settlements, the Cistercians preferred to build in the quiet of the country. The same fact differentiated the Cistercians from the Augustinian canons, such as the builders of St. Bartholomew's, Smithfield. Whereas the Cistercians developed their monasteries as self-contained colonies apart from the world of men, and assumed no communal duties, except that of charity, the Augustinians were priests whose convent was frequently associated with a parish church. This is why Bolton, Carlisle and Bristol priories are still used for public worship, whereas Kirkstall, Rievaulx and Fountains abbeys are in ruins. In their country retreats the Cistercians constructed water-mills and conduits, cultivated vineyards and orchards, reared cattle and horses, kept bees and made glass, and, under favourable circumstances, quickly acquired wealth. Fountains Abbey was founded by thirteen monks from the Benedictine abbey of St. Mary's at York, who adopted the Cistercian rule. They settled near Ripon in the year 1132, and in time owned 100 square miles of land in the district. Desiring to build a church, the monks sent to St. Bernard, who ordered Geoffrey, a monk, to instruct them. Geoffrey superintended the building at Fountains for ten years between 1135 and 1145, following the Norman style, but using pointed arches. The nave of Fountains Abbey is an example of Norman in process of transition to the Gothic style. The Cistercian rules insisted upon simplicity in church architecture. A favoured plan was an unaisled choir with a square end, no triforia, no towers, and no eastern transeptal altars. As every Cistercian church was dedicated to the Virgin, no Lady Chapel was required. St. Bernard said, "A church shall be of the greatest simplicity and painting and sculpture shall be excluded. The glass shall be of white colour and free from crosses and ornaments." He added, "No towers or belfries of wood or stone of any notable height shall be

erected." As the Cistercians developed this simple and restrained style, it was found to lend itself to even greater architectural grace and beauty than the Benedictine method of combining massive power with richness of ornament and colour.

As the monks became distinguished from the laity, churches tended to be enlarged eastward and the choir was screened more completely



MONASTIC SCREENS

from the nave. When the monastic system was fully established in England, there were three entrances to the east end of the minster-church, one through the Pulpitum (this being the *Lower Entry*), the other entries being the *ostia chori* on the north and south of the choir screen. Within the enclosed space were rows of stalls for members of the monastery, which at Westminster numbered sixty-four, twenty-eight being on the north and twenty-eight on the south, and the other eight at the west end. Seats of honour were reserved for the abbot and prior, one of the abbot's seats being south of the Lower Entry, while the prior's seat was on the opposite side of the Lower Entry. An abbot also had a second "throne" near the high altar, which he used during Pontifical High Mass.

In monastic churches after the thirteenth century, the choir was separated from the nave by two screens, the eastern being the *Pulpitum*, and the western the *Rood Screen*, which not only closed the choir from the nave, but held the Rood. When there were two screens, the pulpitum consisted of a broad gallery with a lectern and a pair of organs, and upon it, according to the Use of Sarum, the singers were placed. The rood-screen was built one bay west of the pulpitum, the space between the screens being devoted to the infirm and elderly brethren of the community. Here they held their offices with less ceremony than was judged necessary in the choir to the east of the pulpitum. The rood-screen itself was substantial enough to form a loft, which might be approached by steps against, or in, the piers supporting the chancel arch or the western arch of the crossing. In addition to an altar dedicated to St. Paul in the loft, there was the crucifix which gave the Rood its name, with statues of the Virgin and St. John to right and left. At Westminster, worshippers used to ascend by one stairway, kiss the feet of the Rood, and descend by the other stairway. At Lichfield, in addition to the rood-screen in the nave between the west-crossing piers, there was a rood-screen in the north transept. The altar on this rood was later removed to the north choir-aisle, owing to the difficulties old people experienced in climbing the stairway when making their devotions at the altar of the rood-loft. Fuller says :

" And wot you what spiritual mysterie was couched in this portion thereof ? The church typifieth the Church Militant, the Chancel represents the Church Triumphant ; and all who pass out of the former into the latter must go under the Rood-loft ; that is, Carry the Cross and be acquainted with affliction."

The rood-screen in the nave was furnished with two processional doorways on either side of the central altar, which faced the nave. This was the Altar of the Holy Cross and, to right and left, beyond the processional doorways, were two other altars. Usually, the Altar of St. Mary stood on the south side, the altar on the north being, perhaps, that of the Holy Trinity. At first, a single altar had sufficed, but as the monastic system grew and the habit of pilgrimage increased, extra altars were required. At St. Gall, the famous Swiss monastery which arose around the cell of the Irish missionary, Gall, who died in 645, there were seventy altars. At St. Alban's, four piers in the nave were each furnished with an altar on its western face for the service of pilgrims. At times, the inhabitants of a district acquired the right to use the nave of a monastic church, and a single altar was set against the rood-screen for their use. In such a case the monks moved the other altars east of the crossing to the privacy beyond the screen, where they were shown to the faithful on high days and holy days.

Every Sunday before High Mass a procession of the brotherhood left the choir by the upper entry, on the side farthest from the cloister. During the procession the celebrant sprinkled each altar with holy water, while anthems were sung by the monks. After making " stations " at each of the eastern chapels, the brothers came into the transept next

the cloister, and, having visited the altars, passed through the eastern doorway of the monks' cloister. The final station in the Sunday procession was in the middle of the nave, before the rood-screen. Here the brothers stood in two rows, the position of each member being regulated by stones in the floor of the nave, as at Fountains Abbey, while the celebrant sprinkled the Altar of the Holy Cross. Then the monks passed through the two doorways, united in the bay beyond, and passing through the doorway in the west end of the stone pulpitum, entered the choir once more.

The monkish church beyond the screen was not necessarily confined to the transepts and the space beyond the crossing; it often included three bays of the nave, as at St. Alban's and Westminster. This enclosed space, and not the nave, was the place of worship in mediæval times. In the centre was the *ambo*, or reading-desk, used by the lectors during Prime, None, Terce and other offices, and also by the Cantor for the direction of the singing, "when the moncks did sing ther legends at mattins and other tymes." The Presbytery in a Norman church was the open space east of the choir where stood the High Altar. It was separated from the choir by a step—the *gradus presbyterii*—the extra height enabling all to witness the sacred drama enacted at the altar during the celebration of Mass. In the Presbytery, too, stood the Paschal Candlestick, and on the south side were the *sedilia* (sedile—a seat), occupied by the celebrant, the deacon and the sub-deacon during High Mass. The high altar frequently had a retro-sanctuary behind, in which stood the *feretory*, or shrine of the local saint, and near the altar might be a platform upon which sacred relics were exposed on festal occasions. (See the plan of the choir and sanctuary in a mediæval church on page 211. The throne at the eastern end of the southern stalls is in accordance with the *Use* of Sarum, but, in the Roman *Use*, the bishop's throne was on the north side of the sanctuary, as shown in the plan.) In order to guard the relics and see that no harm came to the shrine, a watching-chamber was often built, as at St. Alban's or the Church of St. Frideswide, at Oxford, now Oxford Cathedral. The watching-chamber at St. Alban's is a two-storied erection of oak, the lower portion being furnished with shuttered *aumbries* (lockers) for minor relics. The monk on duty reached the watching-loft above by a narrow stairway. The stone slab of the high altar was a monolith, symbolising the unity of the church, and on it were five crosses, one cut at each of the spots where the bishop touched the altar with chrism during the act of dedication. The five crosses recalled the Five Wounds of Christ. Behind the altar might be a retable, such as that of silver and gold, known as "The Great Sapphire" of Glastonbury, a gift of St. David, who brought it from Jerusalem. On either side of the altar were curtains to keep any draught from the tapers, and above there was often a beam from which reliquaries were suspended, or which held carvings of the twelve apostles or Our Lord in Majesty.

No summary can suggest the variations in the plan and appointments of a mediæval church. There were considerable differences, due to the taste of an individual monastery or chapter, and the requirements of the

several Orders were also very various. A Cistercian monastery was not identical with a Benedictine house. All that can be done is to give a general idea of the manner in which a monastic church satisfied the main requirements of a community—the recitation of the canonical “hours,” the weekly and other processions, and the needful celebrations of the Mass.

A monastic church was used by night as well as by day. Called from their beds at midnight and dressing by the light of cressets—wicks floating in oil which were set upon square stone stands at either end of the dormitory—the brothers entered the church by the night-stair, such as the beautiful example in the south transect at Hexham Priory, Northumberland. Wearing their fur-lined “night-boots,” the brethren took their places in the choir and, when all were seated, the abbot or prior gave the signal for the tolling of the bell to cease, and took his seat in the stall next to the Lower Entry. Every monk and novice rose to his feet and lowered his head for the Triple-prayer—the Pater, the Ave and the Creed—with which the night-office opened. When the Psalms had been recited, those monks who had duties to perform left the church, and the bell announced the beginning of the real service of Matins. This was followed by Lauds, the “Office of Morning Praises” in honour of the dawn of a new day, after which the community remounted the night-stair, leaving the Sacrist in the church to replace the service books in their locker and put out the lights. It was between 1-30 and 2 a.m. before the monks were in bed again. They rose at daybreak for the Hour of Prime, for which the sub-prior unlocked the day-stair, so that the church might be entered from the cloister. The Day Hours were said every third hour—Prime at the first hour, Terce at the third, Sext at the sixth, and None at the ninth.

A monastic church was generally built on the northern side of the monks’ dwellings in order that its massive walls might give shelter from the cold north winds. In Southern Europe, however, the church was generally on the southern side of the buildings, that the church walls might give protection from the sun. With regard to other monastic buildings, the holy Benet had said: “A monastery, if possible, should be so built that all things necessary—that is water, the mill, the garden, the bakery and the different arts—may be exercised within the precincts, so that the monks be not compelled to wander outside, which is altogether unprofitable to their souls.” The buildings of a typical monastery included a bake-house, a brew-house, a granary, a smithy, an infirmary, as well as a guest-house with its chapel and kitchen.

The chapter-house was the executive and disciplinary centre of the community. Here, after Prime and Chapter Mass, the brethren gathered about nine o’clock to discuss communal affairs. Matins for the dead were sung in the chapter-house, before the body was carried through the parlour to the graveyard. The abbot had his seat at the east end with a crucifix above, the rest of the brethren sitting on stone benches around the walls. In the centre was a lectern, where the daily lection from the martyrology was read by the weekly reader.

The cloister was the study of the monks, and was entered from the

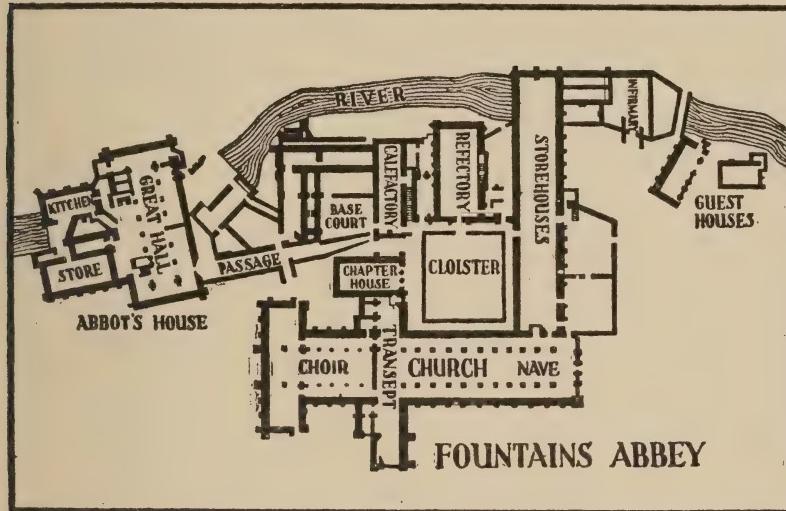
outer court at the end of the western wall of the cloister. The walk next to the church was used for quiet thought. Being on the south—the sunny side—of the church, the walk was sheltered from the north and east winds by the walls of the nave and transept, and was divided by screens into a number of small rooms, known as *carrels*, each containing a desk. There were book cupboards, built of wainscot, against the church wall, though some houses had a special library. Next to the door of the church was the prior's seat, the seat of the abbot being at the end of the eastern cloister. In the eastern cloister, too, but at the southern end, were the novices, under the charge of the novice-master or the Cantor, who taught them the proper chanting of the Divine Office. The western side of the cloister was devoted to the junior monks, still under strict discipline, and constituted the monastic school.

Remembering always that this is a general account, and not a description of a particular monastery, the other monastic buildings may be passed in rapid review. On the southern side of the cloister, facing the church, was the frater, or refectory, where the community took their meals, the west end of the hall being partitioned off from the rest of the frater by screens. The screens formed a passage to the kitchen, and food was served through an opening in the frater wall, called the dresser window. Near the frater entrance was often a lavatory, an octagonal building projecting into the cloister garth. The frater itself was an aisleless hall, with the high table for the chief members of the convent at the east end. The other monks sat at two or more tables, set lengthwise. Near the high table was a reading place, set in the wall, and entered by a stair in the thickness of the wall, such as that in the refectory at Chester. Lastly, there might be a big wall-painting over the high table—usually the Crucifixion or the Last Supper in fresco, as may still be seen at Cleeve Abbey and other places.

Generally the dormer or *dormitorium*, where the monks slept, was an upper room above the eastern range of the cloister and, therefore, next to the chapter-house. If the dormer did not reach the south transept owing to the height of the chapter-house, a passage or gallery was built to the night-stair. In the dormer itself wainscot partitions divided the long room into a series of cubicles, giving a passage down the middle. Each cubicle was lighted by a window and contained a desk. Here a monk could work, if he did not wish to sleep, during the midday siesta in summer-time. For the rest, a large monastery included a warming-house, lodgings for the abbot, and the infirmary buildings, colloquially termed the "farmery." The principal building was the hall, an aisleless room with beds on each side, and a chapel on the east end. A special kitchen, where more delicate food was cooked, was connected with the hall by a covered passage. The infirmary was not only used for the sick; it was also the home of the infirm and a temporary lodging for those undergoing the periodical bleedings, though in some monasteries the monks were sent to small granges near by during bleeding times. The guest-house was in the outer courtyard, near the brew-house, the bake-house, the granary and the smithy. The almonry, or casual ward, was

just outside the gate-house. Here the daily dole of broken meat was given to the poor by the almoner. In the almonry were lodged "the children of the almery," who were educated at the expense of the monastery and were taught daily in the outer infirmary. Near by was an infirmary for the poor, also outside the walls. The plan of the monastic buildings at Fountains Abbey has the general characteristics of all English monasteries.

A monastery in the later Middle Ages served many social needs. It took the place of the poor-law system of to-day; it provided hostels for travellers; its funds served as an important source of capital; it undertook many forms of research which would now belong to universities or the State; in the guest-houses for the reception of travellers



FOUNTAINS ABBEY

and pilgrims, the Guest-Master, occupying the head of the table, might call upon anyone present to entertain the company with music, song, story or dance, and in this sense the monastery was a precursor of the modern music-hall, as certain forms of service gave rise to primitive drama. The place of worship was the centre of this complex whole, and only by continually bearing in mind the manifold social ends served by a monastery can the House of God itself be understood.

TRANSITION TO GOTHIC

The transition from the Norman style to the Early English is approximately the equivalent in British architecture to the transition from Romanesque to Gothic in France and Germany. Mention has been made of the use of pointed arches in certain Cistercian churches built between 1130 and 1170, among them Fountains Abbey, though the church as a whole was Norman in mood and craft methods. Such

examples recall that the pointed arch alone is not evidence of Gothic workmanship. It will be remembered that there were pointed arches in the mosque which his Coptic architect built for Ibn Tulun, in Cairo, in the ninth century. Pointed arches appear in the church of the Holy Sepulchre built by the Crusaders at Jerusalem about 1100. They may be found in the nave of Malmesbury, as well as in the ruins of Fountains and Kirkstall, where the pointed arch is traceable to the fact that the Norman builder, working from pillar to pillar, had to span a space which was less than the width of the adjoining aisles. To do this he utilised the device of a pointed arch, but his choice in no way makes Fountains or Kirkstall Gothic buildings.

The plan facing page 191 illustrates the structural differences between the Norman and the Gothic styles, but they are not all. The difference is one of mood rather than of craft. Powerful and significant as was Norman church building, it was not destined to enshrine all the enthusiasm and imaginings of mediæval England. While St. Bartholomew's, Smithfield, and the abbey churches of Gloucester and Durham were being built, Christendom was becoming discontented with the church which was primarily a "fortress of God." Throughout the twelfth century the habit of pilgrimage increased, and the popularity of the shrines of the local saints necessitated greater space about the high altar and, often, the rebuilding of the apse with an ambulatory which made approach to the lesser altars easy. The outburst of devotion towards the Virgin Mother initiated by Innocent III. (1198-1216) also led to many changes in planning and building. When the services in honour of the Virgin were attended by the whole company of monks or canons, a small apsidal chapel no longer sufficed and a large Lady Chapel became essential.

At Durham, where Bishop Pudsey had previously built a western chapel in honour of the Virgin, Bishop Poore, in 1229, took down the eastern apse and substituted an eastern transept. It is now called the Chapel of the Nine Altars, and consists of three bays divided by massive buttresses, each bay containing three lofty windows, with three altars below, dedicated to (1) St. Andrew and the Magdalen, (2) St. John the Baptist and St. Margaret, (3) St. Thomas of Canterbury and St. Catherine, (4) St. Oswald of Canterbury and St. Lawrence, (5) St. Cuthbert and the Venerable Bede, (6) St. Martin, (7) St. Peter and St. Paul, (8) St. Aidan and St. Helen, and (9) Michael the Archangel. The tomb of St. Cuthbert still stands in the Chapel of the Nine Altars, a bare platform, 37 feet by 23 feet, lacking the shrine which used to stand above it, though the body of the saint is still there. The Rites of Durham describe the altars thus :

" Each had their several shrines and covers of wainscot overhead, in very decent and comely form, having likewise betwixt every altar a very fair and large partition of wainscot, all varnished over, with very fine branches and flowers and other imagery work most finely and artificially pictured and gilded, containing the several lockers or ambers for the safe keeping of the vestments and ornaments belonging to every altar."

The Chapel of the Nine Altars with its clustered columns of polished marble, its deeply vaulted roof, its rich arcading and natural sculpture, stands in graceful contrast to the massive beauty of the Norman nave and choir, and may be taken as typical of the change in English church building between 1175 and 1225. The simple cross, formed by the nave, transepts and short choir of a Norman church, became obscured by the addition of shrines and chapels. In some cases, chapels projected eastward from the transepts; in other cases aisles were built around the choir and sanctuary, as they had been added hundreds of years earlier to the nave. Above all, a more devotional and romantic mood called for expression in the churches, which had been "fortresses of God." The builders and masons, striving after constructive lightness, substituted piers of smaller shafts for the massive Norman columns, each shaft carrying a share of the arch which they united to support. Stone vaulting replaced flat wooden roofs, and lofty lancet windows gave a new suggestion of height. Then, in what seemed a sudden burst of enthusiasm and understanding, an advance was made to a new harmony—the Early English style—in which porch, nave, aisle, triforium, clerestory, transept, choir, sanctuary and shrine were all made to answer to the new mood, a harmony not of science, craft or material alone, but also of faith, thought and imagination.

In order to understand the combination of social and political events which led to the Early English House of God, recall the changes at Canterbury in consequence of the martyrdom of St. Thomas. The significance of Becket's death is the greater if it be remembered that the quarrel between Henry II. of England and his Primate was not an isolated happening. A century earlier Pope Gregory VII. and the Emperor Henry IV. had engaged in the memorable dispute which ended in the victory of Gregory at Canossa. In France, the disputes between Church and State continued until Philip the Fair burnt the bull of Pope Boniface VIII. and seized his person in proof of France's defiance of the papal claim to be "set over the nations and kingdoms, to root out and to pull down, and to overthrow, to build and to plant."

In England the struggle between Church and State reached its height when Henry II. was king, a signal proof of Henry's influence being given when he forced Becket upon the monks of Canterbury as the new archbishop. Becket had been the King's boon companion, but, as archbishop, he served Mother Church with as much zeal as ever he had served the King. The quarrel came over the immunity of the clergy from secular jurisdiction. Had Becket been supported by the Pope and the bishops, the issue of the struggle might have been different. Becket was forced to make submission and agree that there should be no appeal to the Pope without the King's approval. Protesting, he put his seal to the Constitutions of Clarendon. Later, came the struggle at the Council of Northampton. Taking up his archiepiscopal cross, Becket entered the royal court and faced his enemies, ending by proclaiming an appeal to the Pope at Rome. Cries of "traitor" were raised. Becket turned angrily upon the accusing nobles. "Were I a knight," he cried, "my sword would answer that foul taunt."

That night Becket fled in disguise to Flanders. For six years he moved through Europe, intriguing against Henry, seeking to spur the Papacy into upholding the ancient rights of the Church. By 1170 Becket was so far successful that Henry was glad to make peace. But the trouble recommenced. Becket's rival, the Archbishop of York, had crowned the boy king, Henry III. On Christmas Day, Becket preached at Canterbury from the Vulgate text, "On earth, peace to men of good will," recalling how his predecessor, Alphege, had been murdered by the Danes and was buried to the north of the high altar. "It is possible," cried Becket, "that another martyr may be added." There was a murmur in the church, and the Archbishop ended by excommunicating the bishops who had crowned the young king. "May they be cursed by Jesus Christ and may their memory be blotted out of the Assembly of the Saints." So speaking, he flung the candle to the pavement and passed to the altar to celebrate Mass.

Meanwhile the prelates of York, London and Salisbury had come to Henry II., who was at the castle of Bur, near Bayeux. The murder of Becket followed. As the Archbishop left the north transept to mount the stairway leading to the high altar, the knights broke through the door leading from the cloister. A horror of sacrilege prompted the knights to attempt to drag Becket from the cathedral. In the struggle the Archbishop was slain.

That night the monks of Canterbury carried the body of Becket into the Glorious Choir of the Prior Conrad and laid it before the high altar. Until morning the aged Robert, the Primate's confessor, sat among the monks telling what he knew of the dead man's austere life. Thrusting his hand under the white rochet and cloak, he showed the hair-cloth shirt and pointed to the marks of the daily scourgings. The monks were in a fever of excitement. "See, see, that a true monk he was, and we knew it not."

Already Becket was hailed as St. Thomas, and many sought to obtain a scrap of his blood-stained cloak. Arnold, goldsmith to the monastery, was sent to collect in a basin any vestige of the precious blood and brains of the martyr. A man of Canterbury dipped a corner of his shirt in the blood; going home, he gave it, mixed in water, to his wife, who was cured of paralysis forthwith. This incident later led to the mixing of the blood of the martyr with water and its distribution to the Canterbury pilgrims in leaden phials, the phials being worn around the neck as a sign that the pilgrimage had been accomplished. Relics of the martyrdom acquired such value that, in after years, Roger, keeper of the Altars of the Martyrdom, was bribed by the offer of the position of Abbot of St. Augustine to steal a fragment of Becket's skull. He committed the theft and was installed in due course. In another case, Benedict, a monk of Christ Church, when appointed Abbot of Peterborough, abstracted the flag-stones from the martyrdom, two vases of Becket's blood and part of the martyr's clothing.

A rumour that Robert de Broc intended to drag out Becket's body and hang it on a gibbet if it were buried among the archbishops' tombs in the choir, led to Becket being buried in the crypt. Over the hair-cloth

and the white linen shirt and hose, the monks placed the dress in which Becket had been consecrated and the Archbishop's insignia. He was laid in a new marble sarcophagus at the back of the shrine of the Virgin, between the altars of St. Augustine and St. John the Baptist. No Mass was said over the grave, for the church had been desecrated. The pavements of the cathedral were taken up ; the altars were stripped ; hangings were taken from the walls ; the crucifixes were veiled. Service was taken in the chapter-house without chanting. This continued for a year, when the Pope granted a reconsecration of the Minster.

On the day following the murder certain monks of Christ Church had embarked for Rome, bearing an account of the crime. In 1172 the papal legates took back the tunic stained with the martyr's blood and a piece of the pavement on which the brains were scattered. In 1173 the Pope adjudged Thomas a saint. In February, 1174, he was canonised and the 29th of December was set apart as his feast. All over Europe churches were dedicated to his memory, many of which may still be seen.

King Henry II. was not slow to recognise the consequences of the archbishop's death. For three days he shut himself up, refusing all food except milk of almonds. Covering himself with sackcloth, he called Heaven to witness that he was not responsible for the sacrifice. Envoys were sent to Rome announcing his submission to the Pope. In reply, two cardinals were sent to Normandy to meet the royal penitent. In May, 1172, the King performed his first penance at Avranches. For two years the fortunes of Henry were chequered. Finally, he decided upon the great penance of Canterbury. Malchances in war, the failure of crops and the evils of storm, were all attributed to the wrath of God at the saint's death. Every month Becket's fame as a miracle-worker increased. On the 8th of July, 1174, Henry reached Southampton. Feeding upon the penitential diet of bread and water, he reached Canterbury. When he first caught a glimpse of the cathedral Henry got off his horse and walked to the church of St. Dunstan, where he put on the guise of a pilgrim, going on to the cathedral barefoot and clad in a woollen shirt.

After kissing the stone upon which Becket had fallen Henry was conducted to the crypt, where he knelt and kissed the tomb, remaining long in prayer. The Bishop of London then announced the King's penitence, and Henry asked for absolution. Receiving the kiss of reconciliation from the prior he knelt again at the tomb. Removing the rough cloak but retaining the woollen shirt to hide the hair-cloth, the King placed his head and shoulders against the tomb and received five strokes from each bishop and abbot, beginning with Foliot, who had carried the *balai*, or monastic rod, through the earlier ceremony. Three strokes from each of the eighty monks followed. Fully absolved, Henry resumed his robes, but remained in the crypt during the night. At early Matins, he went around the shrines and altars of the upper church. Finally, after hearing Mass and receiving one of the phials of the Canterbury Pilgrims, he rode to London. The defeat of the Scots at Richmond, in Yorkshire, a few days later, was regarded as justification for the penance.

So the human agent received the Church's pardon. But it seemed that Heaven had ordained that the cathedral itself should be purged of sin. Two months after Henry's penance, on the 5th of September, 1174, the Norman choir, which Prior Conrad had built in 1135, was burnt to the ground. The nave was saved with difficulty. William of Sens was commissioned to rebuild the choir, and based his design upon that of his own church at Sens, built a short time before. The architect fell from a scaffolding during the building operations. For a while he continued to superintend the work, being carried round the church in a litter. At last he relinquished the task to William the Englishman, who had designed the Trinity Chapel for the shrine of St. Thomas, placed over the spot where Becket had celebrated his first Mass.

The new choir was finished in 1184, and proved to be Angevin rather than Norman work. That is, it reflected the ideals of the reformed orders rather than those of the earlier Benedictines of Christ Church Priory. The arcades of alternately circular and octagonal pillars in the choir were richly carved with foliated capitals. A transition was being made to the lightness of form and profusion of natural carving which characterised the Early English style. But much of the cathedral remained as before. Not all of Conrad's choir had been destroyed. The south-eastern transept, with its beautiful little staircase tower in the inner angle, can be seen to this day. This was the Tower of St. Anselm, within which was placed the watching-chamber, with its fireplace, whence the monks kept guard over the treasure on the saint's shrine. The double crypt, or rather undercroft, was also unharmed. Built in imitation of the catacombs, it had now an added glory in the treasured relics of St. Thomas which lay in the eastern portion.

The Trinity Chapel was completed in 1220. Two years before, Archbishop Langton made a proclamation throughout Europe that the translation of the Martyr's remains would take place on Tuesday, the 7th of July, 1220. During the festival hay and provender were given to all who asked for it on the road from London to Canterbury. At each gate of Canterbury wine was distributed free. On the evening before the translation the archbishop, the prior and the monks, entered the crypt and opened the tomb. Four priests, distinguished for the sanctity of their lives, took out the relics. First, they offered the head to be kissed, and then deposited the bones in a chest, which was laid in a secret chamber. Next day, "King Henry, the young child," then thirteen years old, headed the procession of notables who carried the chest to the shrine. Hubert de Burgh, the Papal Legate Pandulf, two archbishops and a great train of prelates and nobles supported the boy king.

For a graphic picture of the pilgrims at the shrine of St. Thomas, we turn to the pages of Chaucer's *Canterbury Tales*. Their doings in Canterbury itself are to be found in a post-Chaucerian Tale, which Dean Stanley drew upon when writing the *Memorials of Canterbury*, that masterpiece among cathedral guide-books. On reaching the cathedral the pilgrims knelt before the wooden altar in the transept of the martyrdom and were shown the rusty fragments of Le Bret's

sword. Then they went down the steps to the crypt, where the martyr's shirt and drawers of hair-cloth were shown. The empty sarcophagus in the crypt was built into a wall of large hewn stones, rising a foot above the coffin and covered by a large marble slab. In each side were two openings enabling pilgrims to kiss the tomb.

Leaving the crypt, the pilgrims mounted the steps to the choir, on the north side of which about 400 relics, mostly in ivory, gilt or silver coffers, were exhibited. The privileged were also shown an array of vestments and golden candlesticks in the sacristy, among the treasures being the pastoral staff of the martyr. Many of the pilgrims mounted the steps on their knees, receiving exhortations from the Priory monks as they passed along the choir aisle.

At the extreme east end of the cathedral was "Becket's Crown." Pilgrims were led first beyond the shrine to this eastern-most apse, where was preserved a golden likeness of the head of the saint, richly studded with jewels, which contained the scalp of the saint. A desire to give pilgrims as much to see as possible led to this dismembering the bodies of holy men, limbs or bones being distributed among several religious houses, or even placed in various parts of the same church. Thus, at Lincoln, the head of St. Hugh was severed from the body and placed in a special shrine in the retro-choir. The custom also led to the making of gold or silver shrines resembling the head, arm or foot enclosed, a famous example being the Chef, or head shrine, of St. Peter in St. John Lateran at Rome. The head reliquary of St. Eustace, dating from the thirteenth century, once in Basle Cathedral, may be seen in the British Museum. In Canterbury Cathedral, apart from the body of St. Thomas, there were the bodies of eleven saints, among them Archbishop Dunstan, Archbishop Alphege, St. Odo, St. Wilfrid and St. Anselm, in addition to the heads of St. Blaise, St. Furse and St. Austroberta, and eleven arm reliquaries, one of which contained the arm of Pope Gregory.

Nor were the faithful content to reverence. Many wished to touch the relics and so absorb their healing effluxes. Accordingly a shrine was so constructed that the body of the worshipper could come into contact with its precious contents. In other cases it was only possible to display the relics under special conditions. At Prato, near Florence, the sacred girdle of the Virgin was shown on the day of Mary's Assumption from a pulpit on the outer wall of the church, the pulpit being specially designed by Michelozzo and decorated with reliefs by Donatello. In the Sainte Chapelle, Paris, a single pane of glass was left uncoloured, through which a fragment of the True Cross was shown to the faithful outside.

From the Corona, at Canterbury, the pilgrims passed to the shrine in the Trinity Chapel. In the thirteenth century, the shrine of Becket was the only object in the chapel. The space it covered can still be traced by the large purple stones which surround the vacant square. At the western end was the great mosaic pavement with the signs of the zodiac. Immediately in front was the altar of St. Thomas, at which pilgrims knelt. The long furrow in the purple pavement shows the

place. Before them rose the shrine within iron railings. For the privileged these gates were opened. The lower part of the shrine was of stone, supported on arches where sick and lame pilgrims were allowed to rub their diseased limbs. The shrine was concealed under a wooden canopy painted with sacred pictures. At a given signal this was drawn up, and the shrine revealed in all the splendour of its gold and jewels.

In one of the painted windows of Canterbury is a portion of thirteenth century glass showing the shrine. Becket is depicted issuing from the shrine in full pontificals. Benedict, the monk, lies on a couch asleep. The drawing shows that the shrine, shaped like an ark, was placed upon a stone platform which rested upon arches supported by six pillars. The wooden boards were covered with plates of gold and set with gems. As the wooden canopy was raised, every pilgrim fell to his knees, and the tinkling of the silver bells on the canopy indicated the moment to all the pilgrims in the great church. The inner iron chest, containing the saint's body, could only be seen by mounting a ladder. The prior, with a white wand, indicated the principal jewels, giving the name of each donor, particularly the great carbuncle, large as a hen's egg, given by Louis VII of France.

Then the canopy descended upon the jewelled ark and the pilgrims withdrew by the opposite flight of steps, dropping their offerings into the boxes at the "Point of the Sword," "The Head," "the Crown," and "the Shrine." Securing their leaden bottles, they left the precincts of Christ Church.

The shrine of St. Thomas and the pilgrimages to Canterbury were typical of circumstances which determined the character of most of the greater English churches. When St. Chad died at Lichfield, his body was placed under a wooden erection, fashioned like a little house. A hole in the wood allowed those who honoured the memory of the saint to take out handfuls of earth, "which they put into water and gave to sick cattle and men to drink, upon which they are presently eased of their infirmity," as Bede tells. When Bishop Roger de Clinton rebuilt Lichfield Cathedral in 1148, he placed the relics of St. Chad in a special shrine, and in 1296 and 1386 the shrine was rebuilt, the final form being a substructure of marble bearing a feretory of gold and precious stones. The head of the saint was separated from the body and preserved in a *chef* of painted wood in a special chapel. Some of the relics of St. Chad now lie in a feretory above the high altar in the Roman cathedral at Birmingham. Inasmuch as a saint's *feretrum*, or chest, was usually too large to be displayed upon the high altar, it was set upon a superstructure in the retro-choir, whence it could be seen from all parts of the choir. There was first the marble or stone substructure, decorated with carving or mosaic, then the *feretrum*, decked with gold-work and jewels and, finally, the box-like cover of wood, working upon pulleys, which could be readily raised when the custodians wished to display the saint-chest to pilgrims. The relics of St. Etheldreda were enshrined in this fashion behind the high altar at Ely; so were those of St. Cuthbert at Durham, St. Swithun at Winchester and St. Edward at Westminster.

CHAPTER XIII

ENGLISH GOTHIC

As the rebuilding of Canterbury illustrates the effects of mediæval pilgrimage upon the English House of God, so the work of St. Hugh at Lincoln recalls the structural transition from the massive Norman manner to the style happily described as Early English. The main characteristics have already been set out, but they can be better appreciated in a concrete example, and Lincoln Cathedral immediately suggests itself, followed by Wells, Salisbury and Westminster.

When William of Normandy secured the throne of England, he rewarded Almoner of Fechamp (Remigius), who had aided him with a ship and twenty knights, with the bishopric of Dorchester. The diocese was large, extending from the Thames to the Humber, so the Norman prelate determined to make Lincoln his cathedral city instead of Dorchester on Thames. On the summit of Lincoln Hill, within the Roman wall, and a short distance from William's castle, Bishop Remigius built a church, "strong as the place was strong and fair as the place was fair, which should both be a joy to the servants of God and, as befitted the time, unconquerable by enemies." (Henry of Huntingdon.) A hundred years later a fortress of God was no longer required, and when Hugh of Avalon became bishop of Lincoln in 1186 he determined to build the cathedral anew. Hugh was a man of high character and steady purpose. Son of a Lord of Avalon, near Grenoble, in France, Hugh had entered the Grand Chartreuse in youth. Henry II. persuaded him to come to England and take charge of the newly-established Carthusian monastery at Witham in Somersetshire. Ten years later Hugh was promoted to Lincoln. Hugh found part of his church in ruins owing to an earthquake, and determined to rebuild the short Norman choir in the Gothic manner, with pointed arches. Aided by his architect, Geoffrey de Noyers, Hugh planned a choir of four bays, with aisles and a large chevet. The foundations of the chevet can be traced beneath the Angel Choir, an extension of five bays which was added to Hugh's choir in the thirteenth century. In rebuilding Lincoln Choir, Bishop Hugh created the Early English style. The pointed arch had been used elsewhere, but Hugh and Geoffrey de Noyers allowed the new form full play and devised the appropriate decoration, including clustered shafts, crockets, lancet windows and the characteristic carving on the piers. Always they bore in mind the unity which is the final test of a great work of art. Good decoration must not only be harmonious with structure, but have a definite connection with it by emphasising the constructional lines of a building. The Early English builders, who followed Hugh of Avalon, were not misled. The pointed arch served a

structural end while it added grace to the general design. Mouldings and string-courses prevented rain from staining a wall or disfiguring a window, but they were also things of beauty. The example of St. Hugh established simplicity, purity of outline and reserve of fancy as ideals in English Gothic. This is specially true of the sculpture. Carved work is the flower of architecture, and should arise as naturally from structure as the blossom from stem or leaf. Carving in a House of God, moreover, must be done by men who accept the limitations of stone, and refuse to be tempted into fancies which would only be fitting for bric-à-brac in a noble lady's boudoir. It is possible to exaggerate Hugh's actual achievement, but the fact remains that what he did made possible the later work at Wells, Salisbury, Lichfield and Exeter and in the retro-choir of Hugh's own church.

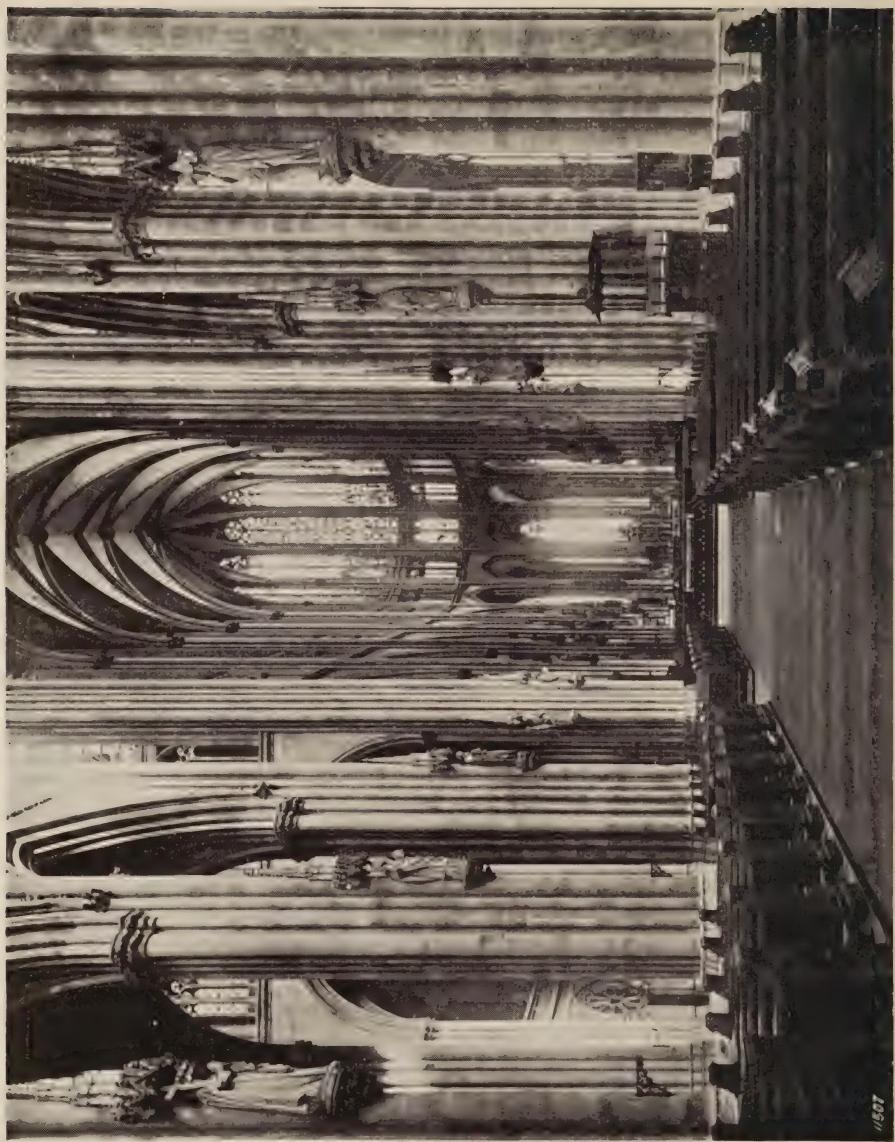
Would that Hugh had been granted more than fourteen busy years at Lincoln ! He died in 1200 and was canonised twenty years later. His contemporaries were well aware of his services to architecture. Ralph de Coggeshall tells : " He began, in honour of the Mother of God, a certain new style of church after a graceful design which seems to surpass all the other cathedrals of England in a certain elegance of its proportions, and this he prophesied would be brought to completion either in his lifetime or after his death." To provide the necessary funds a Brotherhood of the Church of Lincoln was formed, and those who subscribed freely were mentioned by name for a term of years in the prayers of the church. It was also fortunate that Hugh of Avalon was followed in 1209 by another great builder, Hugh of Wells, who held the bishopric until 1235. Being a man of exceptional wealth, Hugh of Wells was able to carry through the plans of his great predecessor. The rebuilding of the nave and the base of the great central tower was carried on by Robert Grosseteste (1235-1253). By this time the fame of St. Hugh's tomb was so great that large funds were available for the building of an eastern extension—the Angel Choir—to contain it, the work being the more necessary because the central tower had crashed in 1237, breaking the vault of St. Hugh's choir. The master-mason who completed the building and carving of the Angel Choir was Richard of Gainsborough, and his achievement carries the story of Gothic architecture in England into the so-called Decorated Period, as Hugh of Avalon's chevet had connected the Norman with the Early English style. The proportions of pier, triforium and clerestory equal anything of the kind in English architecture. Very beautiful, too, is the carved stonework, including the Angel of the Expulsion and other figures which give the Angel Choir its name. They recall the even more lovely angels in the spandrels of Westminster Abbey, the charming angel-musicians in the vaulting above the high altar at Gloucester (A.D. 1350), or the angel cornice in St. George's Chapel, Windsor (A.D. 1500). The angel theme was not worked out in English Gothic with the energy and logic which French designers would have displayed. Nevertheless, it added poetry to many an English choir, where the mediæval imagination loved to picture an eternal *Gloria in excelsis Deo* above and about the altar of the eternal mystery.



GLoucester Cathedral: THE CHOIR

Mansell

(see page 224)

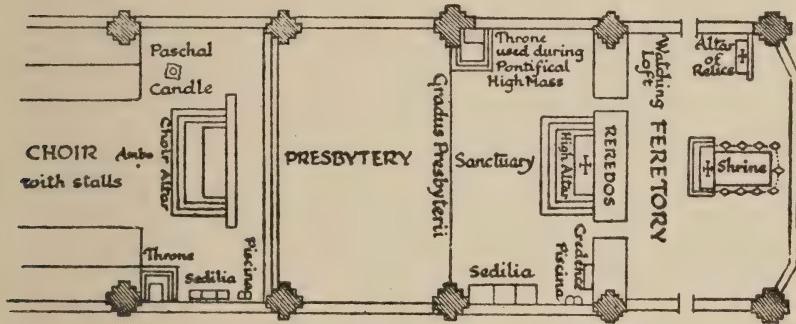


COLOGNE CATHEDRAL : THE CHOIR

(see page 228)

The increasing complexity of Christian ritual and symbolism also afforded opportunities for enriching the mediæval House of God. At Durham an altar screen was given by Lord Neville, which spans the breadth of the sanctuary and continues along the sides, forming sedilia of four seats on either side. The altar screen was pierced by two doors, leading to the shrine of St. Cuthbert behind. Before the Reformation, the Durham screen was filled with 107 figures, painted with gold and colour. Later altar screens are the well-known reredoses at Winchester, Southwark or Oxford.

Close to the high altar was the *piscina*, through which the water used in the holy offices passed into consecrated ground. The celebrant passed to the south side of the altar after the act of censing, and water was poured over his hands. Later, the *piscina* was frequently double, one side being used for the washing of hands and the other for cleansing



THE SANCTUARY

the holy vessels. The *credence* was the table on which the chalice was placed before being set upon the altar, and on which the Eucharistic elements were placed before consecration.

Opposite the *piscina* and the *sedilia*, on the north side of the *Presbytery* might be the Easter Sepulchre, a representation of Christ's tomb, which was used for the reservation of the Holy Elements during the Easter celebrations. There is an Easter Sepulchre of great beauty in Lincoln Cathedral, dating from the end of the thirteenth century. Under a beautifully-carved stone canopy are panels decorated with the figures of three sleeping men in chain-armour, recalling the Roman soldiery who guarded the tomb in Gethsemane. It was customary to kneel before the Easter Sepulchre and say "five paternosters, five aves and a credo, that it may please God's merciful goodness to make us partners of the merits of this His most glorious passion, blood and death."

The Paschal candlestick, which stood in the Presbytery, also had special significance during the Easter celebrations. The Paschal candle was blessed and lit on Easter Eve and was kept alight, day and night, for three days, being usually removed on Ascension Day, though in some churches the candle was lit at certain times until Whitsuntide.

So far as the interior of an Early English cathedral or minster-church

was concerned, the sculptors had their supreme opportunity in the shrines and tombs which tended to arise around the high altar. Those at Westminster show that the English sculptors were equal in skill to any in Europe of their time. The lovely statue of Eleanor of Castile was made in 1291 by Master William Torel, goldsmith of London. On an altar-tomb of Purbeck marble, Torel set a gilt-bronze image of the queen, which was protected by a grating of wrought iron made by Thomas of Leighton. For three statues of Queen Eleanor Torel received £113 6s. 8d., one of the statues being sent to Lincoln Cathedral. The beauty of Torel's "Queen Eleanor" recalls a less famous, but equally lovely example of Early English sculpture—the Margaret of France, also at Lincoln. Margaret was the second wife of Edward I. and married him six or seven years after Eleanor's death. When statues of King Edward and Queen Eleanor were placed at the east end of Lincoln Cathedral, it was natural that a statue of Queen Margaret should be added. The "Margaret" would be one of the best-known objects in world art but for its somewhat inaccessible position, high on an exterior wall of the cathedral, and, it may be added, the curious neglect with which most Englishmen regard their own achievements. The statue was carved about 1305 from local stone by an unnamed genius and "Dame Marguerite," a sister of Blanche the Fair of France, was one of the loveliest women of her age and "good withouten lack." The Florentines have found it necessary to place Donatello's "St. George" under cover, and put a replica in the niche upon Or San Michele. It will be well if the Dean and Chapter of Lincoln are persuaded to move "Dame Marguerite" to the retro-choir within the cathedral, overlooking, mayhap, the site of St. Hugh's shrine. The beauties of this masterpiece of Early English statuary have been neglected over-long. Within the cathedral Margaret would live for those who love Lincoln, as Eleanor lives for those who know Westminster.

Wells, like Lincoln, represents the cathedral as opposed to the minster-church. Neither church was ever associated with a monastic house, as was Canterbury, Durham, Gloucester or Westminster. Wells, indeed, has been described as the perfect cathedral. Early in the eighth century a college of secular priests made their home near the fountain of St. Andrew, served by the Mendip Springs, which still bubble up in the pools of the bishop's garden. In 909, Edward the Elder, son of Alfred the Great, founded a bishopric by St. Andrew's Wells, which, in course of time, became closely associated with the neighbouring monastery of Bath. So closely, indeed, that in early Norman times a bishop of Wells made Bath Abbey his cathedral and suffered the church at Wells to fall into decay. Wells was saved by Robert of Lewes, who was bishop from 1136 to 1166. He not only rebuilt the church, but established the city as a market town by remitting the tolls due to him as lord of the manor. The makers of the Early English cathedral were Bishop Reginald, who held office from 1174 to 1191, and Bishop Jocelin, a brother of Bishop Hugh, who held the see of Lincoln at the same time, and generously supported his brother's efforts at Wells. When Reginald became bishop he called a meeting of

his Chapter, and asked for a grant which would make it impossible that the honour due to God should any longer "be tarnished by the squalor of His house." Sixty or seventy years later, in 1248, when the building fund at Wells was in need once more, the debt was met by a contribution of one-fifth of the income of each prebend. By the end of the thirteenth century, the church of Wells was as beautiful as any House of God in England. The presbytery, the transepts and the eastern bays had been completed under Reginald, and the rebuilding was finished by Jocelin, the date of the rededication being 1239.

The retro-choir, which is to be compared with the Chapel of the Nine Altars at Durham, represents a rebuilding of the eastern end of Wells, in order to link up the main body of the church with the Lady Chapel, built in 1326. The chapel is octagonal, the eight-sided form being completed by two of the six clusters of Purbeck marble pillars which hold up the vault of the retro-choir. The harmonious arrangement of the four smaller piers, with the clusters of marble pillars which complete the octagon of the Lady Chapel, is a beautiful illustration of the principle of unity in fully-developed Gothic. A mediæval House of God could not have unity of design in the Greek sense, but the ingenuity of the later Gothic builders enabled them to fuse many and various elements into a whole, so that we forget that several generations intervened between the building of Durham nave and the Chapel of the Nine Altars, between St. Hugh's chevet and the Angel Choir, or between the choir of Wells and the Lady Chapel. When the imagination adds the soft glow from the windows, the richly-decorated altars and the gold and colour on the arcading, the retro-choir of Wells comes to mind in all its gracious beauty.

Apart from the sheer charm of planning and building is the interest of Wells as "The Perfect Cathedral." The church is the centre of a group of buildings which represent all the requirements of a secular foundation, as opposed to the special needs of a monastic community. When the Anglo-Saxon or Celtic missionaries founded a church, unless the leader of the group was actually a member of a monastic order, he was recognised as a bishop, and his immediate followers and their successors became the canons of his church. Exeter, Lichfield, Lincoln, London, York, St. David's and Salisbury, are other churches which have always been served by canons, under the leadership of their bishop and dean. At Wells, in place of the abbot's lodging and guest-house, there was a bishop's palace, strongly fortified, and separated by a moat from the neighbouring church. The dwellings of the vicars-choral lay on the opposite side of the church to the bishop's palace in a special close, within which were built forty-two houses. They reached the church by a bridge which crossed the Chain Gate and led to the chapter-house and north transept. Within the choir, the canons said their offices, much as the monks did in their minster-churches, the dean and preceptor sitting in the places against the western screen occupied by the abbot and prior of a monastery. A bishop's throne originally stood behind the high altar. Thus, a stone throne, built in the time of William Rufus, is still in this position in Norwich Cathedral, beneath

the middle arch of the Norman apse, the throne being higher than the altar. In early times the bishop was supported by two chaplains, who stood on either side of the little platform on which the bishop's seat was raised. Later, when a saint's shrine was placed at the back of the high altar, the bishop's throne was moved to the side of the altar.

One other feature in Wells Cathedral remains—Bishop Jocelin's west front. It forms a great screen of carved stonework, masking the ends of the nave and aisles, and was made the more imposing by the addition of two towers, built on the north and south of the aisle-ends, thus greatly extending the space available for carved decoration. Wells is the most perfect west front in Gothic architecture, just because the whole scheme is not subordinated to a western porch or a vast western window, as in many French churches. Peterborough shows what the English Gothic builders could create when the desire was to mask the ends of nave and aisles with great doorways. The three great arches in the facade of Peterborough lift themselves to the very top of the western front and also fill the width of the structure. Light and shade, the placing and cutting of the windows, and the delicacy of the gables are perfect in their quiet beauty and power. At Wells, however, the west front is that and something more. In the times of Jocelin de Welles (1206-1242) there was a burial ground for lay-folk at the western end of the cathedral. Against this cemetery Jocelin built a stone facade in honour of the Virgin, supplementing the Lady Chapel at the east end of the church, where the office in honour of the Mother of Christ was sung each day at dawn. In the stone facade Jocelin set about 180 life-sized or heroic figures, and as many more carvings or scenes from Bible story or saintly legend, the whole being distributed over nine tiers. The lowest tier showed the Madonna and Child, with the Gospel Messengers on either hand; the highest Our Lord in Majesty, seated in a vesica-shaped niche. The whole scheme, as Mr. Edward Hutton has said, may well have been suggested by a paragraph from the *Golden Legend*:

“At the third hour of the night, Christ came with sweet melody with the Orders of Angels, the Companies of the Patriarchs, the Assemblies of Martyrs, the Covenants of Confessors, the Carols of Virgins, in order.”

Only nineteen of the life-sized figures remain on the lowest tier, but several statues on the northern tower show the quality of the thirteenth century carving and the personalities whom Jocelin chose to recall as Gospel Messengers associated with the Madonna and the God-Son. Here are deacons, priests, disciples and saints of the early church, women as well as men. A feminine figure, with hood over head, bearing a chalice, has special charm, but equally beautiful in its noble restraint is the figure of a deacon on the east side of the north-western tower, vested for mass, as, indeed, are all the bishops, priests and deacons on Jocelin's facade. Professor Prior and Mr. Gardner have identified four beautiful figures as Elizabeth and the Virgin and an Annunciation

Scene, Our Lady and the Angel Gabriel being represented by neighbouring figures, as at Amiens and other French churches.

The second tier included thirty-one angel songsters, each set in a quatre-foil. Each angel is a small, half-length figure issuing from a cloud and holding a crown, a mitre or a scroll. Of special beauty is the winged angel of St. John the Evangelist in the quatre-foil above the central Coronation Scene, though this figure belongs equally to the Bible Tier. This tier consists of forty-nine quatre-foils, one-half of which picture scenes from the Old Testament and the other half scenes from the Gospels. Among the New Testament scenes on the right of the figure of the Madonna are the Return from Egypt, Christ and the Doctors, John the Baptist, the Sermon on the Mount, the Transfiguration, the Entry into Jerusalem, the Last Supper, Christ before the Sanhedrim, Christ bearing His Cross, the Crucifixion, the Resurrection and the Ascension. On the left hand, the pictures from Old Testament story begin with the Creation of Adam and Eve, and pass by way of the Fall to their punishment, represented by Adam delving and Eve spinning. The Sacrifice of Cain, Noah building the Ark, God's Covenant with Noah, Isaac, Rebecca and Jacob, Ephraim and Manasseh are other scenes which can be identified.

Above the Bible Tier were two tiers set with colossal figures, those representing the temporal powers on the right, just above the New Testament carvings, and those representing the spiritual powers on the left, above the Old Testament scenes. Kings, queens, nobles, knights, and abbesses represent the Temporal; popes, bishops, abbots and hermits represent the Spiritual. St. Oswald with dish, St. Eustace standing in water with a child on each arm, St. Kenelm standing on the kneeling figure of a woman, St. Thomas of Canterbury holding the top of his severed skull to his breast, King Solomon and the Queen of Sheba, types of the coming of Christ, St. Godric in mail armour, St. Alban with the sword of his martyrdom, Saint Calixtus in tiara and Mass vestments, St. Erkenwald of London in mitre, and St. Ethelburga holding a book, are among the figures in the two tiers which have been named with some certainty.

The sixth tier is made up of eighty-eight trefoil-headed niches, which run continuously under the cornice crowning the facade. In each niche is a figure or group representing the second coming of Christ, giving the sixth tier the name of Resurrection Tier. Crowns, mitres and tonsures alone remain to indicate the social positions these men and women held in life; otherwise every one is naked, some being beset with hope or despair, while others sit in dreamy expectation, as though they scarcely realise the significance of the lifting of the stone coffin lids. These naked figures were not always represented in ashen-grey stone, but were painted in colour and stood out from a background of deep ultramarine, beset with shining stars. Indeed, the whole of Jocelin's facade was once bright with colour, traces of which may be found in sheltered spots, such as the tympanum of the central doorway, where blue, scarlet and gold paint can still be seen, the architectural mouldings being also picked out with red, blue and gold.

In the seventh tier is the heavenly hierarchy, the Thrones, the Cherubim, the Seraphim standing in flames, the Powers in mail armour, the Virtues, the Dominions in plate armour, the Principalities, the Archangels and the Angels, and above is the Apostles' Tier. St. Andrew with his cross has a place of honour in the centre. It is said that close examination discloses the five loaves of St. Philip, while St. James the Greater carries the staff and scrip of a pilgrim. St. Peter with the key, St. John with the chalice, and St. Bartholomew with his skin over his left arm, are other figures in the tier. The whole facade is crowned by the noble group of Our Lord in Glory, which once had censing angels in the niches on either side.

From beginning to end, this western facade of Wells may have taken fifty years in building, the carved figures being the work of ten or twelve local masons working between 1220 and 1265. They used Doultong stone from Shepton Mallet. Beginning with the rough craftsmanship hitherto associated with tombstones, they gradually developed a style in which the grace of rippling drapery, natural facial expression and the power which arises from simple masses, were united in figures which were as rich in spiritual appeal as they were in theological significance. Of the west front of Wells it has been said that it was conceived like an orchestral score. "The noble statuary of the three lower tiers is like a deep and fundamental tonality, from which spring the modulating harmonies of the two middle tiers; and the smaller Resurrection Tier and the Angel Tier are the flowing melodies and counterpoint which are their complement and adornment."

If Saint Hugh's work at Lincoln represents the beginning of English Gothic, and Wells the style at its prime, a unique interest attaches to Salisbury as the only cathedral built throughout in the Early English manner. This happy chance arose from the fact that an earlier cathedral on the hill of Old Sarum was abandoned by Bishop Richard Poore early in the thirteenth century, and a site for a new church was selected in the valley about a mile away. The Norman bishop of Salisbury had naturally built his church near the castle on Sarum hill. In more peaceful times, a century and a half later, Richard Poore could move to New Sarum. A temporary chapel of wood was commenced on the new site at Eastertide, 1219, and was ready for use on the following Trinity Sunday. In 1220, a general chapter, at which Bishop Poore was present, decided that, when any canon failed to make good his promised contributions to the building fund, a bailiff should be sent to his prebend and take any corn which was due. In 1227 a charter of Henry III. instituted a fair in New Sarum, from the vigil of the Assumption of the Virgin to the octave of the feast. It would appear that some of the 40,000 marks (£26,666) expended upon the cathedral came from taxes upon the local sales of wool and butter. The church was built of free-stone from the Chilmark quarries about twelve miles away, marble from Purbeck being also used freely. Bishop Poore's architect was Elias of Dereham, an officer of King Henry III., who had previously done work in connection with the shrine of St. Thomas, and later built the Chapel of Nine Altars in Durham Cathedral. Richard of Farley

was responsible for the tower and spire, which was completed about 1300, so that Salisbury Cathedral was eighty years in the making, dating from April 28th, 1220, when Bishop Poore laid the first foundation-stone in the name of Pope Honorius, the second in the name of Stephen Langton, the third for himself, and the fourth and fifth for William Longespée, third Earl of Salisbury, and his Countess Ela, "amidst the acclamation of multitudes of the people, weeping for joy, and contributing thereto their alms with a ready mind, according to the ability which God had given them."

The long, low church, with the upsoaring steeple, is characteristic of English architecture at its purest and best. At Amiens, which was being built at the same time, the lines of construction are vertical; in Salisbury they are horizontal. In Salisbury, too, the divisions between the piers of the nave, the triforium and the clerestory are marked; there is no effort to carry the eye to the vaulting ribs, as a French architect would have done. There is a division of opinion regarding the merit of the interior of Salisbury, but few will disagree with the judgment that the planning of the exterior is unrivalled in England and, perhaps, in Christendom. The spire of Salisbury is 407 feet, compared with the 422 feet of Amiens, but, at Amiens, the church accounts for 208 feet, whereas the nave of Salisbury is only 115 feet. Of the two, it is Salisbury which

" Soars like hearts of hapless men who dare
 To sue for gifts the gods refuse to allot ;
 Who climb for ever toward they know not where,
 Baffled for ever by they know not what." (1).

So great was Bishop Poore's success at Salisbury that Henry III. determined to rebuild the church of the Benedictines at Westminster in the new style. The work commenced in 1245, under the direction of Master Henry of Reyns. The name suggests a French origin, but there is nothing in Westminster Abbey which cannot be accounted for by the supposition that an English master-mason visited France to see the latest churches and, finally, drew a plan for the king on French lines. Sir Gilbert Scott happily described Westminster Abbey as "a French thought expressed in perfect English." Master Henry was followed by two Englishmen, John of Gloucester (1254) and Robert of Beverley (1261). The main structure was Caen stone from Normandy, but Purbeck marble was used for the columns, and masons trained in England were responsible for the building. The vaulting, for example, follows the English and not the French method. The French origin of Westminster Abbey, however, shows itself in the extensive use of flying buttresses, those on the south side, as seen from the cloister garth, being specially effective. The height of the abbey, 103 feet from the choir pavement to the crown of the vault, is greater than that of any English church. Westminster also has the corona of radiating chapels, which is so characteristic of the greater French churches, the inspiration in this case being Rheims Cathedral. This had only been completed

¹ William Watson : *The Gothic Spire.*

two or three years before, and naturally suggested itself to an architect who was in search of the newest ideas. There was a similar *chevet* at Beaulieu Abbey, and the Westminster *chevet* was copied at Battle Abbey and Tewkesbury. Otherwise, the circular apse with its radiating chapels never had the vogue in England which it enjoyed in France. The influence of *Sainte Chapelle*, which St. Louis built in Paris to enshrine the Crown of Thorns, is also to be traced in Westminster.

Henry's rebuilding was very thorough. To-day, almost the only visible remains of Edward's church are the foundations of the apse, including the bases of some piers. In 1245 the nave of Westminster was only a century old, and Henry only intended to rebuild the choir, sanctuary and ambulatory and add a worthy chapter-house and bell-tower. Later, in 1269, his success persuaded him to commence rebuilding the twelve bays of the nave, four of which were devoted to the ritual choir for the Benedictine monks and the pulpitum.

Thanks to Professor Lethaby's researches, set out in *The King's Craftsmen*, and the writings of Mr. J. G. Noppen, it is possible to trace in detail the economic aspects of the rebuilding of Westminster Abbey. In 1243, before the actual building commenced, a royal mandate was addressed to the sheriff of Kent to provide 100 barges full of grey stone. During eight years the king subscribed £17,933 to the building fund, the amount in the fifth year being £2,600, and in the sixth £2,415. By 1250, between 600 and 800 men were at work. The fabric rolls show they were paid about 1s. 1d. a week per man, 39 cutters of white stone, 15 marblers, 26 stone layers, 32 carpenters, 13 painters, 13 marble polishers, 19 smiths, 14 glaziers and 4 plumbers, receiving £15 10s. 1d. John of Gloucester, who was king's mason from 1254 to 1261, and Alexander the carpenter, each received a furred robe of office twice a year in token of their seniority. In 1257, Master John of St. Alban's, "sculptor of the king's images," was working at Westminster, with Peter of Hispania "the Painter." The organisation was in charge of Odo the goldsmith and his son Edward, who acted as treasurers and hired the workmen on the king's behalf. The fabric rolls, which were compiled weekly, discriminate between wage work, "task work," and material. In the Roll of Accounts for 1253 mention is made of two images wrought by "task work," for which £2 13s. 4d. were paid. Professor Prior has suggested these images may be the Virgin and the Angel of the Annunciation on either side of the chapter-house door. The glazing in 1253 cost 4d. a foot for white glass and 8d. a foot for coloured. In 1290, £64 was paid to John of Bristol, king's glazier, for making glass windows for the church at Westminster, being equivalent to about £1,200 in modern currency. In general, the windows were glazed with grisaille patterned glass, containing tiny fragments of bright blue, red and yellow, and charged with heraldic shields. The windows of the apse and the rose windows in the transepts glowed with ruby and sapphire.

There were many opportunities for the minor crafts in such a church as Westminster. Each chapel in the transepts or ambulatory was enclosed with screens, rich with carved ornament, and the choir and

presbytery were ornamented with tapestry hangings. In the south ambulatory, on the plinth of Queen Philippa's tomb, is an oak panel, 11 feet by 3 feet, which adorned the high altar after 1270. It is decorated with paintings enclosed in gilt tabernacles, and ornamented with gesso and glass enamel work, and harmonised with the Golden Shrine of the Confessor behind, which shone like "a candle upon a candlestick, so that all who entered the House of the Lord might see its light," as the Liber Trinitatis tells us. The painted retable is among the treasures of Early English art. Christ is the central figure, with the Virgin and St. John in the side panels. Beautiful, too, is the St. Peter in the dexter bay, and the small scenes of miracles, among them the raising of Jairus's daughter and the feeding of the Five Thousand. In the thirteenth century, this English retable was as glorious in beauty as the Pala d'Oro of San Marco itself, and even in its present state of ruin it witnesses to the wonders of craftsmanship which went to the adorning of Henry's church. The gold-embroidered frontal for the high altar, set with jewels, cost the equivalent of £3,000 in modern currency, and occupied four women for three years and nine months. The pavement of the sanctuary was a mosaic of porphyry and marble and was put down by Italian marble workers in 1268.

THE DECORATED PERIOD—PERPENDICULAR STYLE

A century after Saint Hugh was buried at Lincoln, half a century after Salisbury Cathedral was completed, and before the nave of Westminster was finished, the Early English style was elaborated into a new thing, and the Decorated Period commenced. Arches were still pointed as in the Early English style, but the piers of the columns were more numerous and the shafts were no longer detached as they had been. The sculptured foliage on the capitals of the piers was less conventional. It imitated nature, until the Gothic carvers could associate their craft with all the joys known to man, "gardens, orchards, plants friendly to the cottage, the stories loved by the poor," the minor happenings in life mingling with the sublime, as Rodin once said. Mouldings on arches were elaborately carved; so were corbels, crockets and cusps. The bosses on the vaulting shafts at Exeter are of exceptional beauty.

Early Gothic sculptors had striven to enrich their structure. Later, in the Decorated Period, this sculptured ornament did not articulate the structural design so surely, but was merely added as ornament. The work is most charming on tombs, and in the carved sedilia, piscina, aumbry or screen of the parish church.

Very charming, too, are the doorways of the Decorated Period. Early in the Gothic age the south aisle of a church, used by the monks or canons during the Sunday processions, was beautified by a special arcading, which distinguished it from the plain north aisle of the laity. Under similar influences, the south door was specially decorated or provided with a porch. Memorable among the English doorways are the western porch of Ely, the north porch of Salisbury, the porch at

Beverley and the north and south transept doors of Lichfield. The bishop's entrance to the Angel Choir at Lincoln, the passage-way to St. Hugh's shrine, is as beautiful as anything of its kind in Gothic art. But, in general, in comparison with French examples, an English doorway is inconspicuous. There is nothing in English Gothic to rival the porches of Chartres, regarded as doorways to the very House of God and an expression of the religious emotion to be found within. If the restraint and fertility in design of the English mason were beyond praise, he had to acknowledge the supremacy of the Frenchman in bold planning and vitality of figure-carving.

Another glory of the Decorated Period is the octagon tower at Ely, the invention of Alan of Walsingham, Sacrist and Prior of the monastery for forty years after 1321. In this year the Norman central tower fell, destroying the western part of the choir, though sparing the shrine of St. Etheldreda. The disaster proved a benefit disguised. Instead of rebuilding the tower, Alan raised a central lantern upon eight, instead of four piers, the eight piers being connected by great arches and their complementary vaulting, thus forming the only Gothic dome in English architecture. The vaulting terminated in an octagonal lantern, which is as interesting from the outside, as it is from nave, choir or transepts. Alan of Walsingham began to rebuild directly the débris of the old tower was removed, and the stonework was finished within six years, the whole lantern being complete by 1342 at a cost of £2,400. The Lady Chapel at Ely and Prior Cruden's tiny chapel also bear witness to Alan of Walsingham's claim to the title *Flos operatorum*—"The Flower of Craftsmen."

The early Gothic windows were of lancet form; later, two lancet windows were placed under a single dripstone and the space above was pierced, leading to "plate tracery." When three lancets were placed together, the space above was pierced with three foliated circles, the dividing masonry becoming lighter and lighter until "bar tracery" was reached. By the middle of the thirteenth century a large bar-traceried window of three, five or seven lights had developed. From these arose the even more beautiful windows of the Decorated Period.

Very characteristic are the windows in the ruined abbey at Tintern, a Cistercian house founded by a party of French monks about 1131. Like all Cistercian houses, Tintern Abbey arose in a spot remote from town. First a thatched hut and, at last, the abbey buildings and a church, in which kings were proud to lodge and worship. Tintern was rebuilt in 1269, about fifty years after Salisbury, and in its beautiful windows may be found the first geometrical tracery in England. The east window at Ripon (about 1300) is another superb example of Decorated tracery.

York Minster is unrivalled in its thirteenth century glass, and the more so since the cleaning and re-leading, not a little of which was a thank-offering for victory in the World War. Thus, the Five Sisters' Window was a memorial to the 1,450 women of the Empire who gave their lives between 1914 and 1918. Beautiful, too, is the glass in the Trinity Chapel at Canterbury, picturing scenes from the story of

St. Thomas. The rose window in the north transept at Lincoln, the Dean's Eye, dates from about 1220, the design representing "The Church on Earth and the Church in Heaven." In the centre is Christ among the Blessed in Heaven. The sixteen circles forming the outer part of the design picture man's redemption through the Church. Christ is shown displaying the Five Wounds; angels support the Cross and the instruments of the Passion, holy people are conducted to Heaven by St. Peter and other saints, while the lower circles are filled with figures of bishops and archbishops in their vestments. Not only the statuary, but the windows of cathedral or minster-church were to be read like holy books. *Picturæ fenestrarum sunt quasi libri ecclesiarum.*

This desire to teach as well as to please had elements of danger. The maker of a window in the best period of Gothic was content to present a design of coloured light which had the beauty proper to glass. Just because his medium was coloured light, held together by lines of lead, he was content to do without even such an aid as shading. The leads made pattern enough, and the spectator was not invited to focus attention upon a single feature of the design, thereby disturbing the rhythm arising from the lines of the leadwork and the glow of coloured light.

During the Decorated Period the difficulties incidental to representation were avoided. The decorative possibilities of stained glass were exploited to the full. Echoing and emphasising the emotion aroused by the purely architectural features of the church, the coloured glass flooded the whole building with a mystic light in which the devotional mood was nourished to the full and the sense of the majestic power of Mother Church made plain. Vestments, hangings, tapestries, illuminated missals—all were made of the richest materials and adorned with glowing colour. Ruby, sapphire, emerald and gold were the dominant hues, so that a Gothic interior seemed like some dream cavern, "lit only by the light of jewels, myriads of these gleaming darkly through the gloom," as Mr. Lewis Day said of Chartres.

A French or English church was even richer in emotional colour than the Byzantine House of God had been, because of the solemn beauties due to the half-lights of North Europe. Thenceforward, the ideal of a Gothic architect was to increase the window space in a church, until the walls virtually disappeared and were replaced by piers, with their buttresses, which framed pictures or designs in coloured glass. The principles of Gothic vaulting were so familiar that walls, as walls, were no longer required to hold up the roof. At the same time top-lighting, through the clerestory, developed until the triforium disappeared altogether and the Perpendicular style arose, this being the last phase of English Gothic.

Churches in the Decorated style continued to be built during the reign of Edward III., but the fourteenth century was already producing a change in the intellectual outlook of Western Europe, which was to bring about a difference in English architecture far more marked than that which distinguishes the Decorated from the Early English period. We describe the change in intellectual outlook as the Coming of the Renaissance. As Christianity was the solvent of the ideas which made

the Roman Empire strong, so the Renaissance spirit proved the solvent of mediæval ideas. The Age of Faith was passing. In the middle of the fourteenth century Wycliffe was a power at Oxford and religious discontent showed itself in the form of Lollardism. The Black Death brought about a new economic position, the consequent changes in social conditions being seen in the Peasants' Revolt of 1381. While the Wars in France thinned the ranks and broke the fortunes of many English noble houses, they established the authority of the burghers in the larger towns. Henry V.'s victories in France, including Agincourt, England's eventual defeat at the hands of Joan of Arc, and the new era of prosperity established after the Wars of the Roses, all had their effects upon church building in Britain, and the Decorated style gave way to the Perpendicular.

The characteristics of the Perpendicular style are increased window space, the abolition of the triforium, the absence of deep carving, the use of panel decoration and a peculiar straight-lined tracery. The Perpendicular arch was not pointed but square-headed, while the mullions of the windows were straight. (See plan on page 227.) The Perpendicular builders dispensed with the ornate detail of the Decorative period, with its insistence upon flowing curves and decoration derived from natural objects, and substituted bigger and broader effect, without symbolism, without mystery, but showing a splendid mastery of constructive principles and a perfect appreciation of outline and mass composition. Instead of the flowing lines of Decorated tracery the rigid lines of the mullions were connected with the mouldings of the architrave, the spaces of the window being similarly divided into rectangles. So, in the flat spaces of the buildings, rectangular panelling, in which the rigid straight line was dominant, characterised every part. Mason's work and decoration alike tended to take on the appearance of wood-carving, which was particularly fine in Perpendicular times, the screens, fonts and choir stalls of the period being superb.

Under the influence of these changes, English church architecture lost something of its distinctively religious character. The earlier enthusiasm and emotion were replaced by science and standardisation. The craftsmen had become officialised. The Renaissance differed from the later Middle Ages in being more intellectual, more beset with class distinctions. It renounced the popular element, which had been a link between art and all departments of national life ; art tended to become the cult and the privilege of a small and wealthy minority. During the reigns of Henry V., Henry VI., Henry VII. and Henry VIII., when the Perpendicular style was established, building was a highly organised trade, and included all branches of church decoration and furniture. The architect tended to become a professional man. Thus William of Wykeham, the rebuilder of Winchester, commenced his career as a clerk of buildings, then became a keeper, and finally a designer and superintendent of building operations.

The change was in the direction of modern custom, where the architect or engineer (the modern equivalent of the mediæval "master") has little in common with the subordinates who carry out his ideas.

No architect engaged on a big building has ever been able to be his own craftsman. He has always had to rely upon a host of subordinate workers and their general knowledge of his intentions. In the past, however, there was far more supervision than there is to-day and an architect lived upon a single big job, superintending everything from the quarrying of the stone onward, "working with his own hands both in building and in sculpture, as befits the reputation of any good sculptor and master of the stone-cutting art." It was this personal contact with the job in the doing which tended to be lost in Perpendicular times, though at first only the tendency was there, not the actuality which we find to-day, when the architect often furnishes no more than the design for a building.

Nevertheless, the Perpendicular style came into being in much the same way as the Early English style. Though it proved to be secular in expression it was religious in origin. It originated at Gloucester Abbey.

A great cathedral might be looked for at Gloucester. The town was a centre of the royal power in the west of England throughout the Middle Ages. In the chapter-house William the Conqueror had "deep speech" with his Council; here he ordered the compilation of Domesday Book. Henry III. was crowned in Gloucester Abbey and there Edward I. held a parliament which passed the Statutes of Gloucester. A monastic house had been founded in A.D. 681 by Osric, Viceroy of King Ethelred, whose sister, Kyneburga, presided over a double foundation of monks and nuns. The Benedictine monks were introduced by Canute in 1022, though with little success. When Serlo, chaplain of William the Conqueror, became abbot in 1072, the convent only contained two monks and eight novices. Serlo rebuilt both church and monastery, the church being dedicated in 1100. The nave remains to recall Serlo's cathedral. It is 174 feet long, 67 feet high and 34 feet broad, its characteristic being the great height of the massive columns and the dwarfed triforium above.

The foundation ran its course until the time of Edward II., when Abbot Thoky was desirous of embellishing the old Norman church. But means were small and Thoky was an old man before much had been done. Then came the murder of Edward II. at Berkeley Castle, seventeen miles from Gloucester, on September 21, 1327. Bristol, Malmesbury and other monastic houses in the district refused to grant burial to the king, fearing Queen Isabella. Only Thoky had courage. He sent to Berkeley Castle. The king's body was embalmed and wrapped in folds of lead, before it was placed in an oak coffer and buried in Gloucester Abbey. When Edward III. came to the throne, his father's tomb became a place of pilgrimage. A statue of the murdered king, carved in alabaster from a mask modelled after death, was the gift of Edward III. to Thoky's Abbey.

Abbot Wygmore succeeded Thoky, and determined to remodel the transepts and choir. Between 1337 and 1377 the old Norman windows were replaced with Perpendicular windows; vaults were carved, and over the Norman walls and rounded piers was cast "a mighty stone

veil of traceried panel work." Thus Gloucester was the birthplace of Perpendicular. The choir at Gloucester, in which stands the shrine of Edward II., is 140 feet long and 86 feet high. With its lofty fretted roof, enriched with gold and colour, and its carved canopied stalls of oak, dating from the fourteenth century, the choir of Gloucester was, and is, one of the loveliest things in Christian art.

Only in England would the great east window have been possible. In Southern France or Italy it would have been dazzling owing to its size (72 feet by 38), and the brilliance of the soft silvery tones, faintly coloured with blues, reds and gold—a wall of jewelled glass. Only less striking than the beauty of the window is its historic interest. It dates from 1350 and represents the Coronation of the Virgin, surrounded by angels, apostles, saints, abbots and monarchs, the theme recalling the west front of Wells. Thirteen out of eighteen of the original shields inserted by the donors of the window recall survivors of the Battle of Crecy, among them Edward III., the Black Prince, Talbot, Pembroke, Warwick and Arundel. The drawing has been compared to the work upon a Greek vase, the faces and drapery being outlined in brown enamel, and some of the detail added in a silver stain, varying from lemon yellow to a deep orange. The very description of the Crecy window suggests a change from the glass of the Early English period. The earlier glass, or pot metal, was obtained by fusing molten glass in the pot with metallic oxide, so that the glass was coloured throughout. Such glass was necessarily of little value for a pictorial draughtsman and consequently "subject" was of small importance in Norman and Early English windows. In the Perpendicular age, glass was stained by hand, and the staining was burnt into the glass, so that windows were no longer "colour" but "coloured."

The gain, if gain it was, lay in the fact that persons and scenes could now be depicted. At the same time, the upper lights of a Perpendicular window were divided into panel-like compartments, giving the glass painter, as opposed to the glass colourist, every opportunity. In many churches the older "rose" and other Early English windows were replaced by great windows adorned with Perpendicular tracery and elaborate pictured designs. To be compared with the Crecy Window at Gloucester is the east window at York, built in 1408 by John Thornton of Coventry. This was 78 feet by 33. Thornton as glazier received 4s. a week and £10 on completion, assistants and material being supplied. The west window at Carlisle is also memorable.

Another achievement of the Perpendicular builders is the cloister at Gloucester, the finest and best preserved in England. The walls of the cloister are Norman work, but the whole was vaulted with fan tracery and overlaid with Perpendicular panelling between 1350 and 1400. The east alley was a passage between the church and the *farmery* and from it opened the chapter-house, the parlour and the *dorter*. The northern alley was given over to novices. On the stone bench against the wall may still be seen scratched diagrams for such games as Fox and Geese and Nine Men's Morris. The monks' *lavatory*, occupying four bays, was also in the north alley. On a broad ledge stood a lead

cistern, or *laver*, with a row of taps and in front a hollow trough for washing. In the groined *almery* opposite, the monks kept their towels. The west alley served as an outer parlour in which the monks could converse with visitors. The south alley was used for study between dinner and evensong.

Lastly, there is the Lady Chapel at Gloucester, built about 1475 and representing the blown flower of the Perpendicular style, as the earlier work in the choir was the bursting bud. The chapel is 91 feet long, 25 feet wide and 46 feet high and is practically walled with glass, framed in panels of delicate tracery work. The vaulting of the roof is beautiful in the extreme, every boss being worthy of attention. The whole was enriched with gold and colour, traces of which may still be found on the canopies and panellings.

Beautiful as is the Lady Chapel at Gloucester, it is eclipsed by the Lady Chapel which Henry VII. added to Westminster at the very end of the Perpendicular Age, in memory of Henry VI., the reputed martyr, who, however, was never canonised. Henry VII.'s Chapel consists of a nave, two aisles, and five eastern chapels, forming a chevet. The foundation stone was laid in 1502 and the chapel was finished by 1519, a wonderful effort when the wealth of craft expended upon its exterior and interior is recalled. The restoration of the Lady Chapel at Westminster between 1932 and 1935 made it possible once more to appreciate the figured sculpture which adorns the building, an aspect of the work which Henry VII. specifically mentioned in his will, when he ordered that the "walles, doores, windows, Archies and Vaults and ymagies of the same our Chapell, within and without, be painted, garnisshed and adorned with our armes, bagies, cognisaunts and other convenient painting, in as goodly and riche manner as suche a werk requireth, and as to a Kings werk app'teigneth." The colour was never added, perhaps because Renaissance taste tended to rely more completely upon realistic representational decoration than definitely Gothic taste had done.

No less valuable was the restoration done in St. George's Chapel, Windsor, between 1921 and 1930, at a cost of £200,000. This crowning glory among Perpendicular chapels was not finished until 1528, when architectural custom dictated that the high vault of a roof should be almost flat, "Bold to ostentation" as Wren said a century and a half later. Thanks to the energy of Dean Baillie, the Chapter of St. George's was able to remove every hint of danger from the structure. Very happy too was the effect of removing the organ to the north and south sides of the central loft, instead of across it, so that the amazing stretch of high vaulting was once more visible from one end of the church to the other. In the very spirit of the Age of Faith was the collect of thanksgiving used during the rededication of St. George's in 1930:

"To-day, furthermore are we bound gratefully to acknowledge and thank Thee, O God, for the skill, the care and patient diligence which, through Thy kindly and holy Spirit of Wisdom, have been vouchsafed to, and shown forth by, the Architect, with his foreman, and by the

artificers, masons and joiners, upon the task thus laid before them, and at length successfully achieved in full true-hearted unity of purpose."

No great cathedral was built in the Perpendicular style. Always there was a refacing of an earlier Norman building. This was the case at York, at Canterbury and the classic example at Winchester, where the work was commenced by Bishop Edington and completed by a great English builder, William of Wykeham. As in the choir at Gloucester, the Norman columns at Winchester were pared down to flat surfaces and a veil of rectilinear panelling was placed over the whole. At the same time the old Norman roof was hidden under a groined vault. The filling of the triforium arch was removed, so that the top of the triforium formed the head of the new Perpendicular arch, the Norman clerestory being replaced by windows. The work cost William of Wykeham the equivalent of £200,000 in present currency. Another feature of Perpendicular church building is happily illustrated at Winchester, the erection of chantry chapels in memory of wealthy notables or public benefactors. There are no fewer than eight such chantries in Winchester Cathedral.

These chantries are the English equivalent of the chapels which the French guildsmen built between the buttresses of the nave in their own cathedrals and communal churches. In England, guild life scarcely had the importance it attained in France. Instead of chapels recalling the connection between religion and trade, the English cathedrals and churches had chantries, perpetuating the memory of individuals. Usually, they were small chapels built to surround a tomb and were placed under the arches separating the aisles from the nave or choir. Though some date from early in the thirteenth century, most of the chantry chapels belong to the early part of the fifteenth century when little other building was going on.

The chantry of Abbot Ramryge at St. Albans and the Warwick chapel at Tewkesbury, with the wonderful tabernacle work which Isabel Despenser caused to be built in honour of her first husband, Richard Beauchamp, Earl of Worcester, are other examples. Isabel Despenser's second husband, Richard "de Bello Campo," was memorialised in the equally beautiful Beauchamp Chapel at Warwick. Lastly, Henry V.'s chantry at Westminster was built upon a platform at the east end of Edward the Confessor's chapel and included a remarkable bridge, rich with carved stonework, over the ambulatory. Add such treasures of art as the Perpendicular tower of Magdalen College, Oxford, King's College, Cambridge, and such a church as St. Mary Redcliffe, at Bristol, and the heritage Englishmen owe to the architecture of the Tudor age is great indeed. And even these leave out of account what is perhaps the real glory of the Perpendicular age—the smaller parish churches, each with its nave for the villagers, its chantry for the squire, its porch for the parish business and its bell tower.

If Englishmen did not put up cathedrals which told of the energy and power of great communes, they built churches which testified to the part the Lord of the Manor and the village community had in national life at the dawn of the Renaissance. What the English did may seem less



ST. LAWRENCE, NUREMBERG : THE SACRAMENT HOUSE

(see page 230)

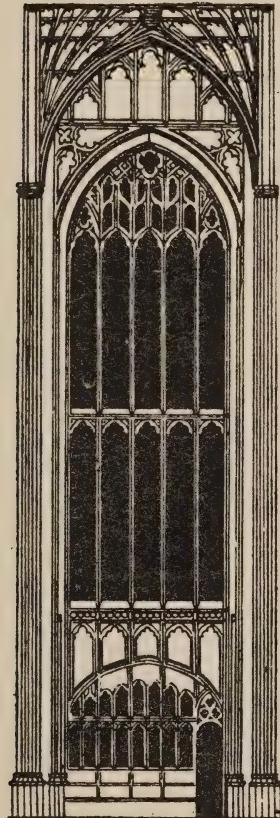


TOLEDO CATHEDRAL

Anderson

(see page 232)

impressive than the efforts of those who built Chartres, Beauvais and Amiens, but who shall say the endeavour of our countrymen was less worthy? It was characteristic of the French and the Italians to attempt the greatest things in art; if the endeavour failed, yet it had been made. English builders chose to do lesser things, and do them perfectly. By the perfection of their efforts they will be judged.



PERPENDICULAR STYLE

(see page 222)

CHAPTER XIV

GERMAN AND SPANISH GOTHIC

THE RUSSIAN HOUSE OF GOD

The passage of Renaissance ideas from Italy to the communities north of the Alps presaged the end of Gothic architecture. Christendom was seeking other methods of expression. But before the growth of the new spirit in Italy, its birthplace, is reviewed, mention must be made of Gothic art in other parts of Europe than France and England. Reference has already been made to the influence of French building methods upon German architecture and the medley of French, Roman and Moorish influences in Spanish religious art. It would be of deep interest to trace this mingling of styles to its sources and connect it with the social and political conditions in mediæval Germany and Spain, but space will admit of no more than a bare summary of the facts. As has been said, the choir of Cologne Cathedral was a frank imitation of Amiens, beautiful but borrowed, a fact to be regretted, as German builders in Romanesque times had shown themselves fully capable of devising methods suitable for their special building material, brick. Unfortunately at the very time French builders were making the change from Romanesque to the new thing required by the age of the Crusades, the political situation in Germany was anarchic. There was no powerful monarchy to which the German trading towns could rally and the German bishops and abbots were too much occupied with their interests as feudal princes to spare the thought needed to organise and direct an architectural fund. Until 1254, when the rule of the Hohenstaufen ended, there was a political premium upon conservatism, and consequently upon the Romanesque style. It was not until 1274, when the Hapsburgs established their authority, that Germany found temporary peace. Such a town as Nuremberg then developed her wealth and independence, aided by grants of special privileges from the Holy Roman Emperor who supported the townsfolk against their feudal rival, the Margrave of Brandenberg.

An early example of German Gothic is the Liebfrauenkirche at Trier, built in 1240. The plan is distinguished by the absence of a triforium. The later mediæval German churches were congregational and were designed for spaciousness rather than the ritual requirements of a monastic community, or the special needs of a pilgrim church. Being churches for townsfolk, there was space in the nave and aisles rather than in the choir. Such spacious congregational churches are known as "*hallenkirchen*," and frequently the naves and aisles are of approximately the same size and are covered by a single high-pitched roof, the

lighting coming from the aisle windows instead of the clerestory. The church of St. Elizabeth, at Marburg, is an example of a design without a triforium and with aisles and nave of the same height. St. Stephen's Cathedral, Vienna, which suffered greatly during the last war, had neither clerestory nor triforium, and the aisles and nave being of equal height were covered by a single high-pitched roof. Very effective, too, was the great pyramidal spire of St. Stephen's. The brick-built Marienkirche, at Lubeck, has neither transepts nor triforium, but in this case there is a lofty clerestory, the nave being 125 feet compared with the 67 feet of the side aisles. The dexterous craftsmanship of the German builder is shown in such work as the pierced spiral staircases on the outside of the towers of Ulm and Strasbourg, and the pierced spire of Strasbourg Cathedral.

Away from the Rhine Valley, in such a town as Nuremberg, a German church attracts less by the originality or vigorous logic of its planning than by the picturesque buttresses, doorways, shrines and sacrament houses with which the German master carvers embellished the buildings. At Nuremberg, the church of St. Sebald was rebuilt in 1309 and a Gothic choir replaced the Romanesque choir between 1361 and 1379. The exterior of the choir of St. Sebald has highly ornate buttresses which frame the windows. Each buttress is decorated with canopies and niches for sculpture, and each window is surmounted by carving, which leads up to the delicate openwork parapet encircling the exterior of the choir. The north porch is known as the Bride's Doorway and here the blessing of a bridal pair took place. The porch is decorated with pierced tracery of wonderful delicacy and carvings of the Wise and Foolish Virgins, which once glowed with happy colour, as may be seen on a similar doorway at the Liebfrauenkirche, Nuremberg. The preservation of original colour is a feature in German churches of the mediæval age. Inside the church is the shrine of St. Sebald upon which Peter Vischer and his five sons worked for thirteen years. Such a shrine had long been contemplated but funds were not forthcoming until 1506, when a robbery in the church persuaded the Society of Patricians to promise the 2,000 gulden required. As a fact the subscriptions were not easy to secure, but in 1522 the shrine was completed. It took the form of a miniature Gothic chapel, 15 feet high, enshrining the oak coffer encased in beaten plates of gold and silver in which the bones of St. Sebald lie. Below are bas-reliefs of scenes from the life of the Saint and on the pillars supporting the richly worked canopy are the twelve Apostles.

Cupids, sirens and other Italian ornament recall that, in time, the shrine of St. Sebald belongs to the Renaissance, but the craft mood is that of its pious, stay-at-home maker, as he modelled himself, garbed in the leatheren apron of a founder and carrying hammer and chisel. Peter Vischer may be regarded as the last of the guild craftsmen who made Gothic art possible. He was followed by the individualists of the Renaissance, scholars, travellers and men of the world, who could hold their own with kings and popes—by Brunelleschi, Bramante and Michelangelo. Peter Vischer was paid 20 gulden for every hundred-

weight of completed work, "as in the case of the monuments in the cathedral at Bamberg." There is much significance in the contract.

Equally characteristic of this phrase of German Gothic is the church of St. Lawrence. It was originally a little chapel of the Holy Sacrament. When the citizens of Nuremberg won wealth in the thirteenth and fourteenth centuries, the chapel was rebuilt to meet the growing needs of the town and dedicated to St. Lawrence, deacon and martyr, a saint who had much honour in Nuremberg. The western facade, with its towers flanking a rose window and a carved doorway, is a pleasant combination, the carving on the doorway showing what German sculptors could do in competition with their rivals in mediæval France. The Virgin Mother is a central figure in the scheme and is surrounded by seated prophets and apostles, who fill the mouldings. The tympanum is divided into three zones, the lower containing scenes from the childhood of Christ. Scenes from the Passion occupy the central zone and the Last Judgment the upper zone. The most characteristic feature in the interior of St. Lawrence is the Sacrament House of Adam Kraft. A German sacrament house is to be compared with the Easter Communion at Lincoln, or the tabernacle which Donatello carved for the Church of Santa Maria della Febbre, now in the Sacristy of St. Peter's, Rome, with its charming groups of child angels, who gaze, with the shyness of real children, upon the wonder-working picture of the Madonna in the centre of the tabernacle. None of the English Easter sepulchres or the Italian tabernacles compare in ingenuity of craft with the great sacrament houses of Germany. That in Ratisbon Cathedral is 52 feet high, while that in Ulm Cathedral is 90 feet from base to top. A German sacrament house is a tower-like structure resembling a miniature Gothic spire and takes the place of the monstrance and ciborium as a host-shrine enclosing the body of the God-man. In the earliest Christian age the consecrated bread was hidden, but, as Christianity came to its own, the Eucharist was displayed, recalling that God was indeed in His House. When more of the sacred bread or wafer was consecrated than was required for a particular celebration, what remained was placed in a receptacle which might be regarded as a tomb, and accordingly was decorated with carvings of the raising of Lazarus, the Three Marys and the sleeping Roman soldiers. On the contrary it might be regarded as a tower for the protection of the holy wafer or as an altar shrine. At St. Lawrence, the conception adopted was a tower, and the Sacrament House took the form of a miniature Gothic spire. Adam Kraft's work is 64 feet high and tapers gracefully to the roof of the church, to such a height that the top must perchance curve gracefully along the vault of the church. It is enclosed within three iron screens, the actual ciborium being borne upon three figures, carved to represent the sculptor and his two assistants, a daring reminder of the difference in outlook between a communal church in democratic Nuremberg and a monastic church in England, France or Italy. Above the ciborium Adam Kraft carved figures of the Virgin, Gabriel, Moses and Jacob, from which arise a profusion of pinnacles and buds of masonry, enclosing scenes from the Passion, among them the Last Supper, Christ

on the Mount of Olives and Christ bidding farewell to His Mother. An amazing example of industry and ingenuity this Sacrament House of Adam Kraft.

Only less interesting is the Angelic Salutation which hangs from the choir vault of St. Lawrence, carved in wood by Veit Stoss in 1518. The Angelic Salutation is a German variation upon the basic idea of a French or English rood, but instead of symbolising the Passion, it recalls the Incarnation. Life-sized figures of the Virgin and Gabriel are framed in a great circular garland of carved roses, set with medallions illustrating the Seven Joys of the Virgin. Above the Virgin hover angels, and the design is surmounted by God the Father. Again a miracle of design and handicraft.

Christian Spain had less time to develop architecture and symbolic sculpture to serve its special needs than did the people of Germany. Very little was possible until Castile and Leon were united and Cordova and Seville were taken from the Moors in 1235 and 1236 by Fernando III. Even then the beauty of the Moorish mosques was so manifest that the Christian bishops were tempted to adapt them to their own requirements. The mosque at Cordova is still a Christian cathedral, and at Seville the bishops purified the mosque which the Moors had built in the twelfth century and dedicated it anew to the service of God and the Virgin Mother. The minaret from which the *muezzin* chanted the call to prayer at sundown is still the tower of the Christian cathedral, and in the court before the cathedral is the Moorish fountain with its octagonal base, which used to be the centre of the arbour of orange and lemon trees which the Moors like to associate with the House of their God. By A.D. 1401, however, the mosque was falling into ruins and the people of Seville determined to build a church which would even eclipse the glories of Cologne and Milan. "Let us build such a vast and splendid temple that generations yet to come will cry of the men of Seville—'They were mad'." In this spirit the bishops and clergy gave half of their stipends to the building fund, and the kings of Spain, living in the Alcazar near by, made generous contributions. In the sixteenth century the wealth of the see was immense. Under Philip II, the Archbishop of Seville had 80,000 ducats a year and during the reign of Philip III, there were 14,000 clerics in the diocese, of whom 100 served in the cathedral itself. It was, therefore, possible to build the third largest church in Europe, Seville Cathedral being only excelled in area by St. Peter's, Rome, and Cordova Cathedral. It is 430 feet long, but 250 feet broad, extreme width being a characteristic of Spanish Gothic. A single aisle of Seville is as large as the whole of the nave and choir of Westminster Abbey. What the cathedral lacks is the supreme merit of unified design—the apparent uniformity which, nevertheless, embodies a vast complexity of ideas and emotions in one whole. The numerous doorways of Seville, for example, do not display the visible connection with the rest of the building which distinguishes the porches of Chartres, Bourges or Rheims. But in the solemn gloom of the interior, under the soft glow which falls from the old Flemish glass which cost the Chapter of Seville 90,000 ducats in a single year, the

colossal proportions make their full appeal and suggest the infinity which the imagination of the builders sought.

The only memorials of importance in Seville Cathedral are those of St. Ferdinand, who delivered Cordova and Seville from the Moors and lies in a coffin of wrought silver in the Capilla Real, and of Christopher Columbus. The mariner was buried originally in the parish church of Santa Maria de la Antigua but, at the request of the people of Seville, was brought to the Carthusian monastery of Las Cuevas. Then, in 1536, the remains were taken to Cuba and were there 350 years, until the island revolted from Spain. Early in the twentieth century the Cuban republicans returned the bones of Columbus to the city of his adoption, and they lie in the tomb which held them in Havana. The sacred vessels and jewelled reliquaries of the church include the great silver monstrance of Juan Arfe, which requires twenty-four men to bear it in procession.

For the actual building, travelling German and French builders were employed, and Moorish craftsmen were permitted to lend their aid, as many details in Seville Cathedral recall. This eclectic origin is to be noted in many Spanish churches. Of Leon, Street says that the church is French in detail, in plan and in general design, the west porch being an exact imitation of the transept porches of Chartres. Toledo Cathedral is a five-aisled plan recalling Bourges, though it is 50 feet wider. Indeed, the width of 178 feet is only 12 feet less than the nave of Milan. Like Seville, Toledo Cathedral occupies the site of a mosque, which was used as a Christian church until 1227, when the mosque was pulled down and the cathedral built. Granada Cathedral, dating from A.D. 1529, is a renaissance version of Seville Cathedral, classical orders being added to the Gothic piers which carry the vaulting. Noteworthy, too, are the Spanish churches which derive from the Romanesque churches of Toulouse, rather than the fully-developed Gothic of the Ile de France. Thus the cathedral of Gerona has an aisleless nave of four bays, recalling the aisleless churches of Albi and Toulouse. Guillermo Boffiy, the master of the works at Gerona, had difficulty in persuading the Chapter to allow him to attempt the vaulting of a 73-feet span, but he had his way and the result was a congregational church of splendid spaciousness, giving a clear view of the high altar from every part. The Cathedral of Santiago de Compostella (rebuilt about 1100), is almost a replica of the church of St. Sernin, Toulouse.

The eclectic origin of Spanish Gothic had its drawbacks, and the style often lacks the logical construction which characterises the best French churches. Spanish builders never interested themselves greatly in the forms which arise from function, and over-elaboration in decoration deprived their churches of the more balanced beauties of the best French examples. The florid western towers and lantern of Burgos Cathedral in Northern Spain, the sixteen-sided central tower of Toro, the ornate facade of the church of San Pablo de Valladolid and the Glory Porch of Santiago de Compostella, have only to be mentioned to recall the energy and craft skill which the art fund of the Catholic Church could command in late Gothic and Renaissance times. Memor-

able, too, is the wealth of decoration lavished upon the retabiles in Spanish churches, where a reredos is enriched with the lavish ornamentation which the German carvers devoted to their great sacrament houses. The retabiles in Seville Cathedral, in the church of St. Nicholas at Burgos, in the larger churches at Saragossa, are a few outstanding examples. Add the carved wood stalls of Burgos, Toledo and Saragossa, and it will be plain that the Spanish House of God during the 400 years after San Fernando afford matter for a book, rather than a section of a chapter.

CHURCHES OF EASTERN CHRISTENDOM—RUSSIA

As the House of God in mediæval Spain, especially in its over-lavish and redundant decoration, was conditioned largely by influences derived through the Moors, so, in Eastern Europe, the Christian place of worship was conditioned by historical events arising from the Turkish conquests. Christianity was introduced into Bulgaria in 864 and art influences from Byzantium were potent for several centuries, a popular form being a cruciform domed church on a square plan, the interior being decorated with richly-coloured frescoes. When the Turks captured Bulgaria in the fourteenth century, the larger Christian churches were transformed into Moslem mosques and the Bulgar Christians were forced to be content with tiny meeting-places, often half-underground, which had few or no characteristics to distinguish them from private houses. After the Treaty of Adrianople, in 1829, by which the freedom of the Christians in Turkey was officially recognised, many Christian basilicas were built. The Cathedral of Alexander Nevsky, at Sophia, with its golden domes and its remarkable interior wall paintings, was only completed and dedicated after the World War of 1914.

Christian art in Russia also owes many of its characteristics to the centuries-long pressure from Tartars and Turks. When Constantinople fell in 1453, Holy Russia inherited the religious influence and art traditions of Byzantium. If Constantinople was the second Rome, Moscow was the third, as the most influential body in the federation of religious communities which made up the Orthodox Eastern Church and included the Christians of Turkey, Syria, Egypt, Greece, Serbia and Rumania. All were in communion with each other, and with the Latin Church, until the great Schism of 1054.

In pre-Christian times, Russia was a loosely-knit pastoral country on the banks of the Dnieper, a land of great plains, where experience tended to a crushing uniformity, and therefore a breeding place for dreamers and poets, rather than political organisers of the Roman type. From time to time caravans of Scandinavian merchants passed along the trading route through Novgorod and Kiev, going to Constantinople, and Norse warriors, who served in the Byzantine armies, were wont to travel by the same route. In the tenth century certain of these Northmen were tempted to assist the Russian trading towns in their local quarrels. Other Norse adventurers came south to Kiev, carrying their light war

galleys across the marsh lands until they could utilise one of the great Russian rivers. They then passed south to the Black Sea and Bulgaria, where they were faced by the armies of the Byzantine Empire and the Byzantine Church. In 971, the Russo-Norse rulers of Kiev were defeated in battle by the Byzantine Emperor, John Zimiskes, and in 989, the Russian ruler, Vladimir, was converted to Christianity. Aryan nature worship became a thing of the past and the praise of the Trinity was sung instead of the rites of Peran and Wolas. Vladimir was the Constantine of Russia. The story goes that, seeking an alternative faith to the primitive Slav nature worship, Vladimir sent deputations to several Christian lands. One party of Slav magnates came to Constantinople and was astonished by the lights, the singing and the processions of deacons in *Sancta Sophia*. In particular they were impressed by certain youths in white wings and dazzling robes, who seemed to float in the heights of the great church, singing "Holy, Holy, Holy."

"Who are they?" asked the Slavs.

"Ah, those are the Holy Angels," replied the wily Byzantines.

"Enough," replied the Russians, "we will search no more, but return to our king and tell him what we have seen."

As a consequence of their report, Vladimir was baptized and a bishop from Constantinople was established as the first Metropolitan at Kiev. Later, the monks of the Order of St. Basil established themselves in Russia.

The first Russian churches were square log huts, with an apse at the east end and a domed roof, probably derived from poles of birch wood, which were planted in a circle and bent to a centre to form a wattle roof. For many centuries wood was the only material for building in Russia, and Russian architecture was slow to lose traces of its origin in wood, particularly in the domed towers and steeples. A typical Russian church had three apses and four domes arranged around a central dome. The famous Church of the Assumption in Moscow, built by Boris Gudonov, had thirteen of these domes, arranged around the central cupola. Other characteristics of Russian church architecture were due to weather conditions. There is much moisture in spring, following the melting of the winter snows and the flooding of the great rivers. It was, therefore, customary to build churches so that the place of worship formed the second storey, the ground floor being often occupied with shops. Cold necessitated small windows, while the heat of summer may explain the covered gallery surrounding the Church of the Assumption. Damp and frost also made carved exterior decorations, such as gargoyles, unsuitable, so brightly-coloured distempers and mural pictures were freely used. Inside, a Russian church was decorated with mosaic pictures and frescoes, the chief ritual feature being the ikonostas, a sort of rood screen east of the pillars supporting the central dome, which separated the priests in the sanctuary from the worshippers in the body of the church. This screen was adorned with ikons and other relics, and was a development of the primitive cancelli. These were often furnished with curtains on rods which concealed the celebrant at the altar, as the ikonostas should do. The sanctuary in a

Russian church was disclosed during Mass by the sudden opening of the Royal Doors in the centre of the ikonostas. The Holy Table in the apse was surmounted by a small baldachino, behind which was a *thronos* for the chief priest, with seats on either side for the minor celebrants. The choir was a raised dais immediately to the west of the ikonostas. Beyond the nave was a narthex, which often had a gallery for women above. During service, priests and acolytes moved freely among the congregation, censing the sacred ikons in turn, while the voice of the celebrant behind the screen was answered by the deacons on the other side. Then the Royal Doors opened and the priest was seen amid clouds of incense. The worshippers prostrated themselves and the doors closed. Russia never had its Reformation. "Always," as Soloviev has said, "the pearl of the Gospel was covered with the dust of Byzantium."

For more than a century Kiev was the centre of Russian national life and a city comparable with Constantinople itself. The religious influence of Kiev may be judged from the fact that, under Jaroslav (died 1054), it contained 400 churches, including St. Sophia, with the tombs of the Grand Dukes. Then came the Tartar raids, during which Kiev was plundered and destroyed and its influence passed to Moscow, which, in future centuries, was to be the dynastic centre and rallying point of the Russian Slavs. Moscow was further north than Kiev and much colder; the Tartars found it correspondingly difficult to winter there, after a successful raid for slaves. The River Moskva served as a highway for trade, and the Kremlin hill, which was fortified after 1147 enabled the people of the Moscow district to put up a defence against the dreaded raiders. By establishing monarchism in Russia, Moscow aided the growth of the autocratic system which enabled Russia to rid herself of the Tartar yoke and withstand the threats of Swedes, Lithuanians and Poles. As an aid to establishing the influence of Moscow, Ivan Kalita (the Purser), who reigned from 1328 to 1340, established Moscow as the religious centre of Russia, by moving the Metropolitan from Vladimir and building the Cathedral of the Assumption, the Uspenski Sobor on the Kremlin. This became the mausoleum of the Patriarchs and the crowning place of the Tsars. Ivan Kalita's church was built of wood, but the Church of the Patriarchs was rebuilt in stone in the reign of Ivan III. by the Italian architect, Aristotle of Bologna. The most prized treasure in the church, a relic which served as the palladium of Russia for centuries, was the ikon of the Virgin from Vladimir, with its rich garniture of jewels, said to have been painted by the apostle Luke himself. The ikon hung upon the ikonostas, and was credited with saving Moscow from the Tartars in the time of the mighty Tamerlane. When the Church of the Patriarchs was rebuilt in 1472, Russian unification had become possible and the Princes of Moscow, harsh, cruel and self-seeking as they were, were the acknowledged rulers of the Russian Slavs. Ivan III. (the Great), who ruled from 1462 to 1505, married Sophia, a niece of the last Byzantine emperor. She had been educated at the papal court in Rome and came to Moscow with a numerous retinue, to assist in bringing Ivan's kingdom under papal influence. Sophia, however, quickly forgot her Roman upbringing,

and, instead, assisted Ivan the Great in making Moscow heir to the influence which passed from the Byzantine Empire when Constantinople was taken by the Turks in 1453. Though the influence of Italian artists upon Russian architecture must not be forgotten, more potent was the influence derived direct from Constantinople through such a man as Ivan, the artist monk, who brought many holy relics from Constantinople to Moscow after the Turkish triumph.

Ivan III. and his successor Vasili III. were builders of renown, a common practice being to build churches and endow monasteries in Moscow from the proceeds of fines laid upon captured towns. Thus, the Church of the Intercession of the Virgin (Vasili Blajenni), the Cathedral of Saint Basil, was built in 1553 from the proceeds of a fine laid upon Kazan, when it was captured by Ivan the Terrible in 1552. The church, which has been described as "a nightmare in stone," was a strange congeries of domes, towers and spires, the basis of the design being nine chapels, each having cupola and spire, raised upon an arched vault. The fantasy lavished upon the nine bulbous cupolas was beyond description, one resembling a pineapple, another a melon, a third recalling the bristly back of a hedgehog, while a fourth was spiral. Every dome was coloured vividly, the central tower of the Virgin being gilt. Ivan's church had none of the graces of classical architecture and lacked the constructive logic of a Gothic cathedral, but it was Russian in its gay romance and boisterous vitality, and its message is of vanity, extravagance and unthinking passion—the vanity, extravagance and passion of its builder.

The troubled history of Holy Russia might be followed to the end, and its effect upon religious art traced in detail. It will be sufficient to recall the break in the national tradition which came when Peter the Great established his policy of Westernisation. In the nineteenth century there was some reaction from the classical style, which was dominant under the early Romanoffs. One interesting result was the church of St. Vladimir, at Kiev, built between 1862 and 1896 and decorated with paintings by Nesterov, Vaznetsoff and other artists. The arrangement of domes upon narrow, circular arches was happy and the interior paintings are of great interest. On the north wall, by the font, was a vast picture of the birth of Russian Christianity, picturing the march of the army of King Vladimir to the Dnieper for the first baptism. High above the altar was a majestic Mother and Child. In the choir, at the west, was pictured the story of Adam and Eve, while, on the eastern side, was the Crucifixion and the Resurrection. The columns of the cathedral were decorated with great figures of the warrior saints who championed the cause of Russian Christianity through the ages.

In creating his House of God, the pre-Revolution Russian was building a place where the Infinite could take form during moments of spiritual insight. Before the ikonostas, hearing the mysterious movements of the priests beyond the Royal Doors and watching the acolytes censing the ikons, the Russian felt that his God was revealing Himself as Spirit and was comforted. It is nothing that much in Russian religious

art does not answer to æsthetic canons accepted in Western Europe. Not the light and liberty of Greece, but autocracy and serfdom, and centuries of devastating raids during which Christian Russia was nearly driven back into barbarism, these furnish the clue, together with the wonder of men and women who had never lost contact with the magic of sunshine and frost, and with the mystery of birth and death, dearth and plenty. If Russian architectural forms attained proportions which the Western judgment rejects as fantastic, it is because the influence of Western art upon Russia has been little more potent than the Greek influences which Indian and Chinese Buddhism absorbed through Bactria and Gandhara. A people perplexed built the churches of Moscow and Kiev, but a people with hearts astir and lips athirst.

Immediately after the Revolution of 1917, Christianity lost its appeal for Russia. Bolshevik leaders denounced it as 'the opium of the people'. The cathedral of St. Isaac in Leningrad was converted into a 'workers' museum. Taklin, the leading Bolshevik architect, designed a Temple of Reason, built of iron and glass, the whole erection being capable of movement by machinery, 'so as to give the impression of eternal energy', as its builder explained.

Such sensational projects did not survive the first burst of destructive power and, during the Second World War, a marked revival of the earlier Russian religious temper was disclosed. This was the less remarkable as the Soviet authorities had done sterling work in collecting, preserving and restoring the mediæval ikons. Indeed, the efforts of the Central State Restoration Workshops resulted in nothing less than a rediscovery of the treasures of early religious art in Russia, as was shown in the fine exhibition of ikons at the Victoria and Albert Museum, London, in 1929.

Naturally such buildings as the Lenin Mausoleum, the Palace of Technique, and such a theatre as that of the Red Army in Moscow, tended to monopolise the attention of architects, and there was a cessation of all building activities between 1941 and 1946. But as experiments with form, to the neglect of content, diminish, the Russian building traditions will re-establish themselves, and religious architecture will profit, along with the other arts with which Russian artists of all types have been wrestling during the past half century, in the effort to meet the needs of a communist community.

CHAPTER XV

THE ITALIAN CITY-STATES

What of the Gothic element in the House of God to the south of the Alps, in Italy, where an intellectual outlook had developed very different from that in Northern Christendom in the Middle Ages?

The Italians never fully grasped the structural principles of Gothic architecture. When they tested the potentialities of the pointed arch, the buttress and ribbed vaulting, they did so with diffidence. Nevertheless, when the Renaissance outlook established itself, the Italians formulated an architectural style well fitted for their own needs and also for the requirements of other European communities which based their social systems upon humanism, a national state, and the other social and political circumstances which distinguish modern from mediaeval times.

It would have been strange if an architectural style suited to Italy proved equally fitting for France, Germany and England. The light, the spacing, the very flora of an Italian countryside, are different. The cypresses and aloes, the silver-grey tones of the olives and the rich masses of the lemon trees of Northern Italy, recall nothing in northern nature. Above all, Italy has the blueness of its blue skies, which intoxicates the Northerner with its strange beauty. He may have seen as rich a blue, but never one with such radiance. Every tone in the landscape is keyed to this wondrous azure, as scenes on the other side of the Alps are keyed to the grey skies of the North.

Largely because of these differences in geographical situation the mysticism of the south differs markedly from that which arose in the dim forests of Germany, where the northern outlook was born. The Southerner contents himself with life as he finds it, and has no special yearning for communion with some dim, far-away reality, lost to man in the depths of the Unknown. This was one reason why the Italian architects failed to appreciate the characteristics of the House of God in which the northern temperament found expression. Preferring the flat roof, the blank walls and horizontal lines of the familiar basilica, Italians failed to cultivate the taste for the clustered piers and pointed arches of the Gothic manner. With many reminders of Roman architecture about them; they hesitated to abandon the semi-circular arch. Feeling instinctively that space was wanted, the Italian builders widened their naves and depressed the vertical lines of their designs, searching for the serenity which belongs to Greek lintel architecture, or the round arch of Rome, rather than to the upspringing, unresting arch of the Gothic style.

Other circumstances tended to discourage the growth of Gothic.

In Italy the strong light made big windows not only unnecessary but undesirable, and there was no insistent craving for vast expanses of coloured glass. In place of pictured windows, the Italians relied upon painting the walls, vaults and other spaces in their churches. A preaching church such as Santa Croce cannot be understood as architecture alone; to the walls, columns and roof must be added the tombs of the great Florentine families and the sermons in fresco with which the chapels are decorated. Window spaces were small, and the walls substantial enough to resist the thrust of the vault. Flying buttresses were, therefore, unnecessary. The Italian campanile, too, remained a bell-tower and did not develop into a feature of the general design as in the north, fear of earthquakes, in part, accounting for the detached bell-towers. The central tower over the crossing of an Italian church is almost unknown; instead, the Italians developed the Byzantine dome.

In Italian Gothic, accordingly, we do not find the principle of architectural unity exploited as it was by French builders. Instead of one presiding, all-determining idea, as J. A. Symonds said, we welcome many separate beauties, wrought by men of independent genius, whereby many diverse elements become a whole of picturesque, rather than architectural, impressiveness. The influence of Florence was very potent, and the method of training Florentine artists in the fourteenth and fifteenth centuries tended to increase the importance of the complementary arts. In Milan, a young architect served his apprenticeship, working under the instruction of a master of the works upon some big public building. The authorities selected youths of promise, paid their apprenticeship fees, and later they were admitted to the guilds as masters. In Florence, the training school was not a building but a goldsmith's shop. In a *bottega*, such as that of the Pollaiuoli or Verrocchio, the crafts of the painter, sculptor, goldsmith, architect, bronze-founder, tomb-maker and decorative designer were united. A young Florentine apprentice began at the bottom, only slowly rising to the position of assistant and, finally, to the skill which justified admission to the guilds. Thanks to this system, the Florentine was, in turn, mason, carpenter, painter, glass-stainer and sculptor, while, all the time, he might really be perfecting his capacity as a master-builder. The arts, the greater and the lesser, were a unity in fifteenth century Florence, and an architect instinctively learnt to utilise them all for the glory of God.

It was under these conditions that the new architecture of humanism arose and was brought to perfection. This was based upon the art of Greece and Rome, but it was not because the Italians of the fifteenth and sixteenth centuries saved a mass of Græco-Roman art from destruction that they were able to hand on to the world of to-day most of the positive forces which make up modern art and culture. Rather, it was because the Italians liberated thought, and set education above tradition and knowledge above surmise. Decision, clarity of judgment and simplicity of taste made it possible for the Florentine builders of the fifteenth century to bring something of worth from the past and yet give it the turn which signifies fresh invention. By 1500 the pioneer work was done and the Florentine impulse passed to Rome and Venice.

For fifty years it had full power ; then it tended to weaken, though afterwards Italy had Bernini and the masters of the *baroque*. At last, the impulse was transmitted to France and England and, eventually, to every land where men have accepted Renaissance architecture as an expression of Western European civilisation.

Like every art movement, the architecture of humanism must be studied in its origins. There were centuries in Italy, as in France, Germany and England, when circumstances favoured the growth of an architecture akin to Romanesque or Gothic. When the Carlovingian Empire broke up after the death of Charles the Great, the political situation in Northern Italy was closely analogous to that in France and Germany. Power passed to nobles trained in arms, each supreme in his own district. At the same time the more powerful churchmen sought independence as feudal lords. When Otto I. became Holy Roman Emperor in A.D. 962, he created a number of new marches in Northern Italy and handed them over to German feudal chiefs. To the House of Scala, with its home in the fortress of Verona at the foot of the Alps, was entrusted the task of defending the passes between Germany and Italy. To the House of Este, the Italian branch of the House of Welf, were given the keys of the Po. To guard against an undue increase in the authority of the nobles, Otto made a bargain with the Catholic Church. In exchange for temporal sovereignty, he offered to recognise the spiritual supremacy of the Pope at Rome and the feudal rights of leading bishops and abbots.

Otto and his successors miscalculated the results. The Catholic Church refused to acknowledge the Holy Roman Emperor's claim to unrestricted control in secular matters. A remedy for the political turmoil which ensued would have been a North Italian kingdom, strong enough to withstand both Emperor and Pope. But, as in Greece, geographical conditions favoured disunion. The Apennines cut off the Northern plain from the rest of Italy and divided the plain itself into two parts which, again, were divided and sub-divided by mountain spurs. For many years, Northern Italy was forced to submit to the raids which the German emperors made upon papal territory. Leagues of townships were formed which allied themselves, now with Emperor, now with Pope. At last the cities found they were stronger by acting alone than when they acted in leagues. By A.D. 1150, each big town was an independent community, making its own treaties and employing its own ambassadors. To win and maintain their rights the Lombard and Tuscan city-states pitted bishop against feudal lord, or played off Emperor against Pope. Only if diplomacy failed did they have recourse to arms.

Gradually, the North Italian townships developed strongly differentiated characteristics. Genoa, Pisa, Siena, Florence, Milan were not only sharply distinguished from the feudal principalities of Northern Europe, but from one another. Aristocratic Siena, with her lordly families, was a very different social entity to Florence, which gloried in her democratic guild system. Siena was a hill-town ; Florence lay on either side of a ford over the Arno, at the foot of the hills. Whereas

Siena was generally Ghibelline and supported the Holy Roman Emperor. Florence was Guelph and based her political fortune upon that of the Pope. Whereas Siena was aristocratic and conservative, Florence tended to be democratic and progressive. Throughout Northern Italy, where the Ghibellines controlled the art fund, the change to Renaissance art forms and methods was slower than in places where the art fund was controlled by the democratic Guelphs.

The greater share which the Italian townsfolk had in communal life brought about many changes in the general mental and emotional outlook. The Italian citizen was not required to jettison a hundred ambitions which would have been out of place in the service of the Catholic Church or in a community dominated by a French or German feudal lord. Before the growth of town life, variety of mental or emotional experience was difficult to secure. Travelling was not easy; books were not common; news passed slowly from place to place. But in Italy, as in Greece, the city-state system led to a new order of things. Each citizen could share in communal politics. A social philosophy arose in which human interests and civic pride were dominant. The Catholic idealists had taught that man must mortify his natural instincts; that he must fix his thought, not upon the present, but upon eternity; that from the renouncement of earthly satisfactions and desires true worth would arise. Not so the men of the Italian city-states. They viewed life as a river in full flood: to be crossed, but to be enjoyed in the crossing. Among the Northern Italians there was never the unreasoning passion and fierce energy which drove the French knights to the Crusades. Instead, there was a discovery of the essential worth of the individual, a mystical intuition of the relation between nature and humanity and a rediscovery of the forgotten beauties and interests of Greek and Roman civilisation. No one has put this better than Burckhardt. Speaking of the connection between art and the rise of individualism, he says:

"In the Middle Ages, both sides of human consciousness—that which was turned within as that which was turned without—lay dreaming or half awake beneath a common veil. The veil was woven of faith, illusion, and childish prepossession, through which the world and history were seen clad in strange hues. Man was conscious of himself only as a member of a race, a people, party, or corporation—only through some general category. In Italy this veil first melted into air; an objective treatment and consideration of the state and of all the things of this world became possible. The subjective side at the same time asserted itself with corresponding emphasis; man became a spiritual individual, and recognised himself as such."

Not all Italy shared in this emotional and mental development with the same fullness. Time, place and circumstance proved specially favourable, firstly, in Lombardy, the broad plain bounded by the Alps, the Apennines and the Adriatic, and watered by the Po and its tributaries, and, secondly, in the fertile valley of the Chiana, through which the Arno flowed west from the Apennines, past Florence and Pisa, to

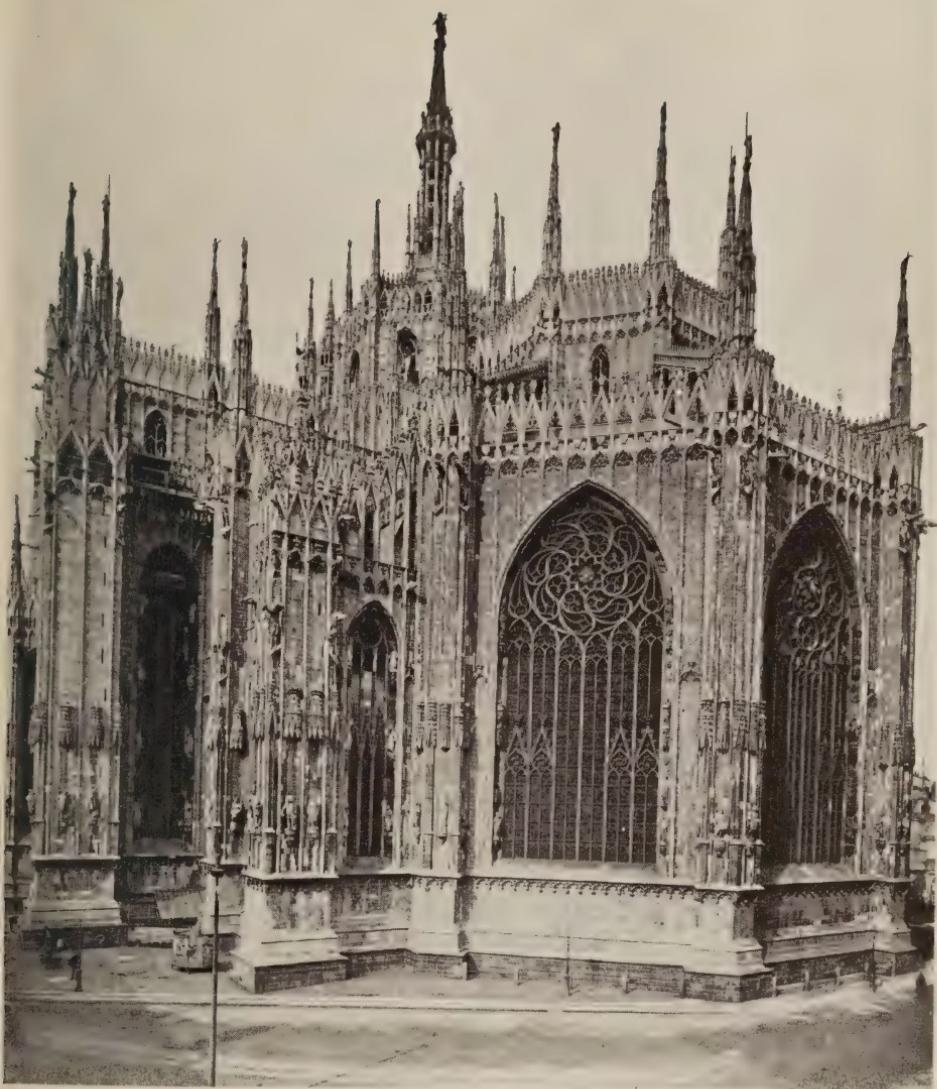
the Mediterranean. In both cases, but particularly in the valley of the Po, the detritus from the mountains produced fertile alluvial plains which favoured the rise of wealthy trading and manufacturing communities, the cities in the valley of the Po including Milan and Mantua; Parma and Bologna; Verona, Padua and Venice. The North Italian merchants early invented methods for exchanging commodities for cash and systems obviating the necessity for carrying coined money. They were the leaders in the development of international exchange and the clearing house system. In a word, they were moderns.

By the middle of the twelfth century, about the time Northern Europe was donning its new White Robe of Churches, the citizens of the North Italian city-states had gained sufficient authority to have a voice in the distribution of the religious art fund. When a baptistery, a cathedral or a Franciscan or Dominican church was to be built, they made their influence felt.

Nevertheless, it was not in the north that Italian builders and their patrons first passed from influences which were definitely Romanesque to those which corresponded with the Gothic movement north of the Alps. It will be remembered that the Normans had established themselves in Apulia in the eleventh century. Being quick to assimilate what was useful in neighbouring cultures, they attracted Byzantine, Greek and Moslem craftsmen, as well as builders and masons versed in the Lombard building tradition derived from classical Rome. Mention has been made of their mosaic and bronze work in connection with Italian Romanesque. The Capella Palatina, at Palermo, built by Roger II. about 1132, with its lovely campanile of coloured marbles and exquisite interior, was described by Ibn Jubair, at the end of the twelfth century, as "the fairest building in the world." The construction and decoration of these South Italian churches was largely the work of Byzantine, Greek and Saracenic craftsmen, though the original urge came from the hardy Norse conquerors of Apulia and Sicily who controlled the art fund. From Apulia, the building tradition and craft skill, accumulated from Moslem, Byzantine, Greek and Italian sources, passed to Pisa.

Pisa was the first of the Italian city-states to win wealth, individuality and power. The Crusades did much for Pisa, as they did for all the North Italian towns. As early as 1022, Pisa sent an expedition to expel the Saracens from Sardinia. In 1099, the Pisans joined the second Crusade, and, in spite of struggles with Genoa and Lucca, Pisa was the most prosperous town in Tuscany during the twelfth and thirteenth centuries. The city had consuls, warehouses and trading privileges in all the greater eastern ports.

The foundations of the Pisan Duomo (cathedral) were laid in 1063, directly after the great naval victory of the Pisans near Palermo. Building material in plenty was available. The Carrara mountains lie a few miles north of the town—dark, cloud-capped heights, with their faces scarred by the white ravines cut by the quarrymen. The Duomo was consecrated in 1118. In shape it is a basilica, with an added dome. The west front consists of four arcades of columns, deeply recessed, so that



Alinari

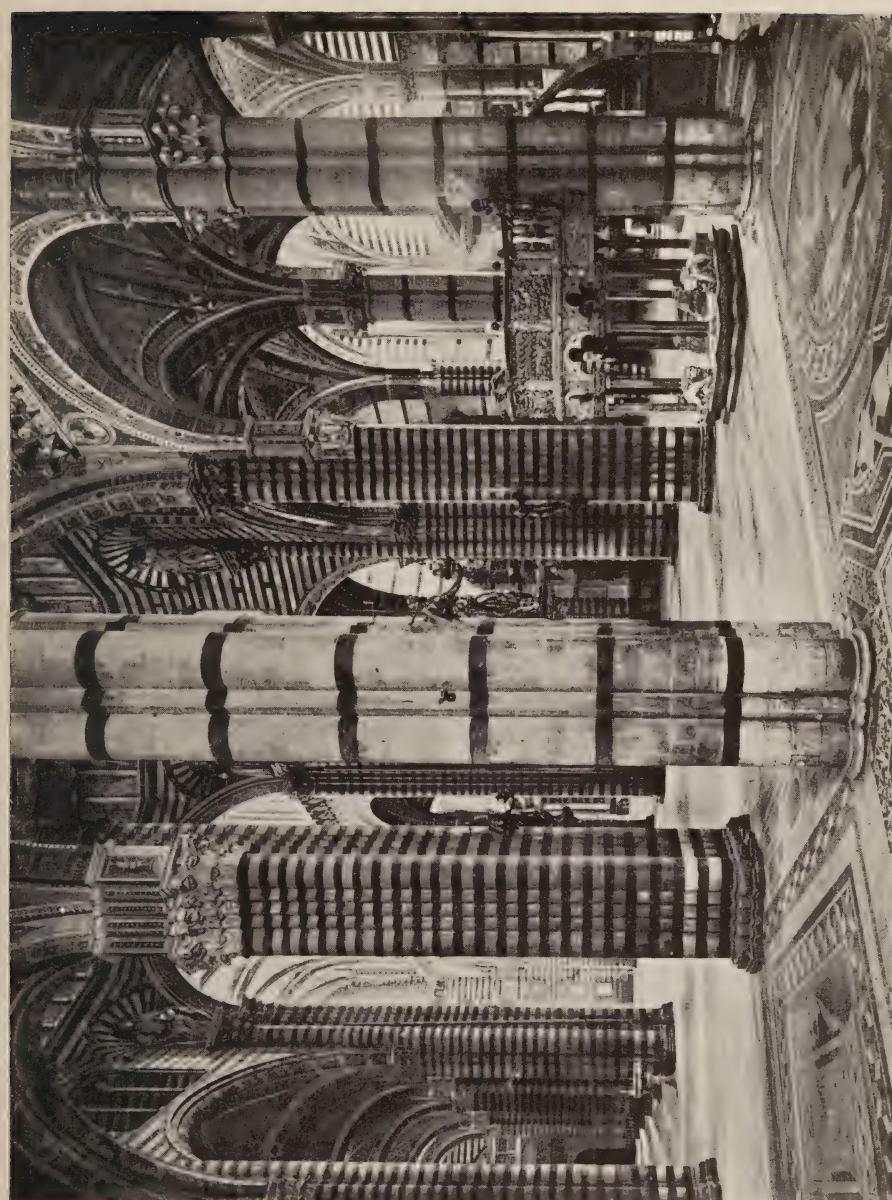
MILAN CATHEDRAL : THE APSE

(see page 239)



(see page 250)

SIENA CATHEDRAL





FLORENCE CATHEDRAL : GIOTTO'S CAMPANILE

(see page 250)

they stand out from the shadow behind, the whole building being faced with white marble. Inside, the roof of the nave is borne by sixty-eight ancient Greek or Roman columns, captured by the Pisans in war. The transepts are long and each has an apse at the end. The Duomo owes much of its beauty to its setting in a corner of the city wall, with the Campo Santo, the Baptistry and the Campanile near by. The Baptistry was commenced in 1152, while the Campanile (the Leaning Tower) dates from 1174. Like the Duomo, the tower is designed with a series of colonnettes, rising in six tiers above the base to the summit.

Perhaps the classical columns in the nave of the Duomo are the most significant feature in this famous group of buildings. Vasari tells that in Niccola Pisano's time certain Greek sculptors were working in the cathedral and baptistery, and adds that "besides the ancient sarcophagi there were many spoils of marble brought by the Pisan fleet." The dilettanti of Pisa felt no prejudice against sculpture, but rather welcomed examples of Græco-Roman art of the classical age. It is often forgotten that, not only in Pisa but throughout mediæval Italy, there were remarkable remains of classical buildings; many more, indeed, than exist to-day. This contact with classical art was a potent reason why the Gothic mood failed to establish itself in Italy and did no more than share a fugitive influence with Byzantine, Romanesque, Moslem and Græco-Roman influences which were contending for mastery in the architectural unity which was to express the faith of the North Italians.

Sir Martin Conway has divided the Pisan builders into four classes—Greeks, local masons, Lombards of the Como school and South Italians. The Greeks were superior craftsmen and carvers with knowledge of the dignified Byzantine tradition; the South Italians had knowledge of the Græco-Roman classical tradition, while the Lombards were trained in Romanesque methods. Under these combined influences an eclectic style was evolved in the district which accepted the hegemony of Pisa, differing alike from Gothic, Romanesque, Byzantine and classical, but owing something to all four. Amid this conflict of contending styles, Niccola, the earliest of the great Pisan artists, fashioned his art and transmitted it to followers who were a potent influence in Northern Italy for a century or more.

Niccola Pisano himself had strong sympathies with Græco-Roman art, but the influences which were to give Italy its architecture of humanism were of slow growth. For a long time tendencies nearly akin to those which brought the Gothic style into being north of the Alps were traceable in Italy—veneration of relics, pride in a religious Order, or the anxiety of a city to identify itself with the might of the Catholic church. The influence of this veneration of relics and images is happily illustrated from the history of the dainty little Chiesa della Madonna della Spina in Pisa.

About A.D. 1230 a tiny Gothic chapel was erected on the banks of the Arno for sailors about to go to sea. The possession of a thorn from the Crown of the Passion gave the little sanctuary a claim upon the affection of the Pisans. When, in the thirteenth century, a wealthy mayor chanced

to cross the Alps into France and returned deeply impressed with the beauty of the Gothic style, the Pisans consented to build a Gothic sanctuary for the Sacred Thorn. The tiny church was enlarged in 1323 and decorated by pupils of Giovanni and Andrea Pisano. The Pisan builders and sculptors were also responsible for some of the most famous shrines in Northern Italy, among them that of Augustine of Hippo at San Pietro in Ciel d'Oro, Pavia, or that of St. Peter, Martyr, in San Eustorgio, Milan.

It is natural that the influence of the alien Gothic mood and craft methods should be seen most clearly in these smaller sanctuaries and shrines. Milan Cathedral, however, is an example of Italian Gothic on the biggest scale. Historically, Milan Cathedral is an example of the rule that where Italian Gothic is most successful it is most Ghibelline and most German. It also introduces another source of building activity during the late Middle Ages—the feudal despots who won power with the aid of the German Emperor and held it by the swords of their retainers at the price of a princely munificence in public works.

The principality of Milan, a land of fruit trees, corn, horse-breeding and silk-culture, owed much of its art to the Visconti family, which established itself in the Po valley during the Guelph and Ghibelline feuds of the thirteenth century. Gian Galeazzo, after making himself Signore of Milan, became hereditary Duke in 1395. He had already ousted the Scaligers from Verona and, when he possessed himself of Perugia, Lucca, Pisa and Siena, few feudal princes in Europe were his equals in wealth and influence.

A man of letters, a gifted diplomatist, and as successful an administrator as he was a soldier, Gian Galeazzo was not the man to neglect the art fund of his state. When the Archbishop of Milan in 1386 announced that "the hearts of the faithful" proposed to rebuild the Duomo of Milan and called upon his clergy to institute offerings in their churches, Gian Galeazzo was manifestly behind the scheme. Indeed, Milan Cathedral was dedicated to Mary who brought the Christ into the world, and may be regarded as a votive offering to Heaven that a son might be vouchsafed to the childless wife of Milan's first duke.

Magister Simone da Arsenigo seems to have been the first architect of Milan Cathedral and was followed in the office by Jacopo of Campione, a member of the famous building guild of the Campionese. They were a band of builders from the little hill-town of Campione, who established themselves at Modena and were later to be associated with some of the greatest public works in Lombardy. Apart from Lombard masons and sculptors, many German builders were employed, for Gian Galeazzo was determined to build in the Northern manner. The account sheets exist, and from them we learn of the purchase of the two large sheets of parchment upon which Arsenigo traced the first plans and that, in 1387, Arsenigo was receiving ten imperial soldi a day, the wage being later increased to ten gold florins a month. When sculptors were needed at Milan, Zeno da Campione, a brother of Jacopo, brought 250 stonecutters to carve pillars and pinnacles. Another master-builder

brought 188 stonemasons to the work in 1399. A hundred years later five youths of promise were sent to Rome for ten years to study the antique and fit themselves to become masters. There are 4,000 and more statues on the cathedral, many of heroic size, so all this talent was required. The wonder is that skilled craftsmen in such numbers could be found, especially as Milan was only one church among scores which were arising in Italy during the fourteenth and fifteenth centuries.

When Duke Gian Galeazzo died in 1402, the great pillars of the nave had been built and the walls were rising. By 1415, the greater part of the work was done, though Milan Cathedral was actually finished by Napoleon between 1805 and 1811. When the driving force of Gian Galeazzo was removed it was difficult to find the funds and labour required for the largest Gothic church in Europe, with the exception of Seville Cathedral. To-day, the exterior of Milan is wondrous in its prodigal display of white marble and sculptured ornament, but wondrous rather than satisfying. Within, the vista of mighty piers, each with a carved capital 20 feet high, combined with the great breadth of the nave and the lovely lighting effects, can never be forgotten. The nave has a double aisle but is without a triforium, while the clerestory windows are only small traceried lights. Most of the light enters, not by the clerestory lights, but by windows in the aisle walls. Yet, while the romance of the interior is making its appeal, the question arises whether this beauty is fully worthy. Pride and ostentation are manifest; boastful display of wealth and craft, where reticent significance would speak more surely of the God of Christendom. Nevertheless, while the sentence is being written, a contrary thought, suggested by John Addington Symonds, comes to mind, and it may be the final judgment upon Milan Cathedral :

"No other church in Europe, perhaps, leaves the same impression of the marvellous upon the fancy. The splendour of its pure white marble, blushing with the rose of evening or of dawn, radiant in noonday sunlight and fabulously fairy-like beneath the moon and stars, the multitudes of statues sharply cut against a clear blue sky and gazing at the Alps across that memorable tract of plain, the immense space and light-irradiated gloom of the interior, the deep tone of the bells above at a vast distance and the gorgeous colours of the painted glass, contribute to a scenical effect unparalleled in Christendom."

The Certosa of Pavia is another vast religious building which arose at the bidding of Gian Galeazzo and which, while it witnessed to his devotion to Mother Church, cried aloud the might and wealth of the Visconti to Christendom. In 1396, Gian Galeazzo offered the site to the Carthusian monks five miles north of Pavia, in atonement for the murder of his uncle, and later gave 15,500 gold florins a year to the building fund. The interior of the church is mainly Gothic, but the well-known facade is in the Renaissance style. Very beautiful is the cloister of the Certosa, with its white marble columns and its terra-cotta arches.

French and English Gothic was an art of stone, whereas brick or

marble were more natural building materials in Italy. Milan Cathedral is a stone building, and for that reason alone is less characteristic of the Italian style than the churches in which marble is the principal material. Thus the cathedrals of Siena and Orvieto were built with alternate courses of black and white marble, the facades being richly decorated with marble carvings and mosaic. At Siena, Giovanni of Pisa was in charge of the building operations in 1284, the year in which he received the freedom of the city and was granted immunity from taxation. Giovanni may have suggested the use of dark and light marble, which had already been tested at Pisa. He was a man of deep-lying religious sensibility and he was building in Siena, where, above all the cities of Italy, men sought to find in art a release from natural things, and desired to body forth their understanding of the ways of God. The very use of black and white marble in alternating courses, which gives such splendid character to the interior of the Duomo at Siena, emphasises the horizontal lines of the building at the expense of the uprising lines of true Gothic. Both interior and facade are things of beauty, but this very beauty emphasises, rather than disproves, the unsuitability of Gothic for the expression of Italian mysticism.

Orvieto Cathedral was due to a visit of Pope Urban IV. in 1263, during which a Bohemian priest of Bolsena, who doubted the doctrine of transubstantiation, was convinced of his error by the miraculous appearance of drops of blood upon the Host which he had just consecrated. Pope Urban, having instituted the festival of Corpus Christi in consequence of the happenings at Bolsena, ordered a cathedral to be built in the neighbouring town of Orvieto. Apart from the conjunction of white and black marble and the splendid sense of space in the interior, the most interesting feature is the great fresco which Signorelli painted upon the dome of the chapel of San Brizio. Signorelli's work approximates closely to that of Michelangelo in the Sistine Chapel at the Vatican, and suggests the transition from Gothic team work to Renaissance individualism, especially when the fresco of the Last Judgment is compared with a carving of the same subject on the facade of the church, begun in 1310. The carving by the Pisani can be compared with the work of the Gothic masons in France, but not with the frescoes which Signorelli painted in 1499, at the very time Florence was passing her dower of humanism to Rome. In the chapel of San Brizio, angels, men and devils alike are as Signorelli visioned them, and owe little to communal imagination or the teaching of Mother Church.

Before the growth of humanism and the circumstances which led to the self-assertion of the individual architect, painter or sculptor are considered, one other factor in Italian church building must be mentioned. In Italy, the great preaching orders of St. Dominic and St. Francis did the service for architecture which the Benedictines, Cluniacs and Cistercians had done for Romanesque and Gothic north of the Alps. Both Orders made their appeal far beyond the borders of Italy. There were great Benedictine and Franciscan churches in London and Paris. London had its Dominican church at Blackfriars ; its Franciscan church in Newgate Street. The Dominicans reached Paris in 1217, and St.

Louis proved a generous friend of the Order, as he was of the Franciscans. But the most characteristic churches of the Friars arose in Italian city-states. In Venice, SS. Giovanni e Paolo and the Frari may still be seen in opposing quarters of the town, with San Marco, the civic church, in the centre. In Florence, the Dominicans began to build Santa Maria Novella in 1279. Fifteen years later, the Franciscans laid the foundations of the Church of the Holy Cross (Santa Croce), on the opposite side of the town. The pious task of building and decorating these churches occupied the following century and a half.

The aims of the Dominican Order differed from those of St. Francis. The one thing in common was the appeal to the democracy. The Dominicans were primarily theologians ; they were the foes of heresy ; they taught what men should believe, whereas the Franciscans taught what men should do. Whereas the Franciscans required an anecdotal art, the Dominicans made ideas the subject of decoration in their churches. Of the Dominicans it was said :

" Farming in all its branches was the order of the day among the Cistercians. But among the Black Friars, those who issued from the house went forth to preach in the open air, at the foot of a cross, in some lonely parish, or else in the cathedral of some town which contained a university. Instead of the hoe, the plough and the reaping-hook, the tools of the Dominican were the pen, the ink-horn, the copybook, the *Summa* and the Bible."

Reference has already been made to the foundation of the Dominican Order at Toulouse, during the Albigensian crusade. This was in 1213, and, in 1219, a party of Dominicans under John of Salerno came to Florence. A few years later, chance gave the Dominican friars an opportunity of establishing their influence in the city. In 1231, the Pope and Emperor were at open enmity. In the course of the struggle Frederic II. was charged with heresy, and the accusation was extended to cover the Ghibelline adherents of the Emperor in Florence. Anti-papal families such as the Baroni, the Cipriani, the Cavalcanti and the Pulci, found themselves under the ban of the Church and, in 1244, the Pope sent St. Peter Martyr, a famous Dominican preacher, to deal with the heretics. He delivered his denunciations of the heretics in the Piazza of Santa Maria Novella and, to deal with possible rioting, he organised a bodyguard called the Compagnia della Fede. On August 24, 1245, the Bartholomew's Day of Florence, the Dominicans exterminated the Ghibelline Paterines.

The Papal success of 1245 was memorialised by a great Dominican church and friary, built on the Piazza, in which the triumphs of Peter Martyr had been won. The foundation of Santa Maria Novella dates from 1278, and it was built of black and white marble. During the next century great sums were lavished upon the church. Buonamico di Lapo, a wealthy Florentine merchant who was childless, devoted his fortune to building a chapel of the Holy Sacrament, which should also serve as a chapter house. This is the well-known Spanish Chapel. The walls

were decorated with a theological discourse in fresco, setting out the Dominican traditions. Other patrons of Santa Maria Novella were the Rucellai, the Strozzi and the Tornabuoni. The facade was designed by Leon Battista Alberti at the expense of a member of the Rucellai family.

The building of the Dominican church of SS. Giovanni e Paolo in Venice was no less typical. First, there was a miracle, then an outburst of popular enthusiasm, and, finally, an intervention of the commune which resulted in the building of the church that popular feeling demanded.

The original Dominican foundation in Venice was due to a body of friars from the monastery of St. John and St. Paul in Rome. Early in the thirteenth century these Dominicans had a small oratory in Venice, upon the site where the Church of SS. Giovanni e Paolo now stands. In 1234, the Doge Giacomo Tiepolo had a dream. This was the miracle. He saw the little oratory standing in a great field of roses, among which white doves, with golden crosses on their heads, were flitting. As he watched, angels with censers came down from the heights and a voice was heard : "This place have I chosen for my Preachers." When the Doge narrated his dream to the Venetians they were deeply impressed, and the Senate handed over to the Dominicans the ground upon which the celestial roses were seen to bloom.

We do not know why the Venetian Senate responded so readily to the Doge's proposal. Probably political motives were potent and, doubtless, they continued to operate while the church was being built. When it was finished in 1430, the church became one of the recognised burial-places for the famous men of Venice. It is vast, lofty and bare, and its interest is largely due to the tombs on the aisle walls. Doge Tiepolo himself is buried here, as is his brother. In an age when few could read and dictionaries of national biography were non-existent, civic life was ennobled by the imagery of the tomb. SS. Giovanni e Paolo is the Westminster Abbey of Venice.

To St. Francis himself religious architecture owed little. When the saint sent a party of Franciscan friars to Paris in 1216, they refused to accept endowments of land or money, and spent their lives working among the sick and poor. It was only after the death of St. Francis that the building enthusiasm was aroused by the generation of friars which followed Francis of Assisi. Brother Elias saw that the Order could not do the work before it if the simple ideal of the founder was followed. A vast church was built at Assisi as the burial place of Francis and, within 100 years, great monasteries, nunneries and churches arose in all the greater towns of Christendom.

In Florence, the Franciscan church of the Holy Cross was designed by Arnolfo di Cambio in 1294. It had a great preaching nave and, at the east end, a corona of ten chapels giving the T-shape so common in churches designed for the friars. Here scholars, soldiers, churchmen and civic leaders were buried, including Michelangelo and Galileo. But the outstanding characteristic of the church is to be found in the wall paintings, especially those in the chapels on either side of the high altar. The mission of St. Francis was to the poor and not to the rich ; to

the ignorant, not to the learned ; common sense led his followers to abandon the methods upon which Byzantine symbolism had thriven, and to adopt others based upon man's natural interest in the natural world. Those who heard St. Francis preach were not content with the formal symbols of the earlier age ; they wanted realistic presentations of Christ and the saints. The demand for anecdotal fresco painting thus created found expression in the art of Giotto, which is so happily illustrated by the painting in the Chapel of the Bardi, in Santa Croce. In Italy, fresco paintings constituted a second Bible, another Golden Legend. The Italian architect was well content to leave great wall spaces knowing that they would be filled by his ally, the painter. What the glazier did in a Gothic church north of the Alps, the painter did in a spacious Italian preaching church.

Florence shared the teaching of the Dominicans and Franciscans with other towns in Western Europe, but the blend of communal pride and individual self-assertion which its city-state system engendered belonged to Florence alone. It is to this we must turn if we would gauge the growth of individualism and humane interests which came to flower in Tuscany at the end of the fifteenth century. Nowhere can the movement be studied better than in Florence, which succeeded Pisa as the most powerful town in Tuscany during the thirteenth century and, in the course of the fifteenth century, became the political rival of Milan, Naples, Venice and the Papacy itself.

Originally, Florence was a small trading settlement at the ford over the Arno on a main road between Rome and the north. Cornlands, vines and olive-trees testify to the rich alluvial soil. Above are hills rising to 3,000 feet, clad in cypress, chestnut and pine. In the tenth century, Florence was dominated by the German Count whose castle was set on the neighbouring hill of Fiesole. But by the end of the thirteenth century the traditions of communal liberty were established, and Florence became distinguished among Italian cities for its whole-hearted support of the popular, or Guelph, cause.

After the fall of Fiesole, the wealth of Florence grew quickly, the prosperity of Florence being due to the activities of its sober burgesses in the thirteenth and fourteenth centuries. Control by manufacturing and trading guilds superseded the rule of the German nobles, the city being governed by a Council elected by the trade and art guilds. In the twelfth century the Calimala, the guild of dressers and dyers of foreign cloths, was all powerful. It developed trade in Lombardy and Germany to the north, down the Arno to the sea, and through the Alpine passes to France and Flanders. At first the Florentines did not weave their wool. Thick heavy woollens were imported from Northern Europe and dyed and dressed in Florence. At the end of the thirteenth century, however, the Arte della Lana arose. By 1239 this guild of wool-workers had learned the secrets of northern looms ; henceforward the Calimala bought wool, instead of cloth, the best coming from Great Britain. In 1300, there were 300 weaving shops in the city. The lowest class of wool-worker were those who washed and combed the fleece on its arrival in Florence. The second class were the spinners of the yarn.

Above them there were the weavers, the dressers, and, at the summit of the trade, the *laniefex*, who sold the manufactured cloth from his basement shop. The laniefex was the capitalist of the Florentine wool trade, and directed the trading operations of the Arte della Lana. When the Florentines determined to build a new cathedral (the Duomo) the Arte della Lana were delegated to oversee the work and collect the necessary funds.

At the time, A.D. 1294, the octagonal Baptistry served as the cathedral of Florence. Seeing the Dominican and Franciscan piles of Santa Maria Novella and Santa Croce arising, the townsfolk were naturally troubled about their tiny communal church, especially as Pisa, Siena and other rival republics or principalities were rapidly rebuilding their cathedrals. Accordingly, Arnolfo di Cambio was instructed to furnish a design for the new cathedral, "in a style of magnificence which neither the industry nor the power of man can surpass, that it may harmonise with the opinion of many wise persons in this city and state, who think that this commune should not engage in any enterprise unless its intention be to make the result correspond with that noblest sort of heart which is composed of the united will of many citizens."

There was material in plenty, white and coloured marble, and *pietra serena* from the Apennines near by. As a youth, Arnolfo had worked under Niccola Pisano. Coming to Florence, Arnolfo was set to work upon the Baptistry, until he was commissioned to supply a design for the Florentine Duomo. Arnolfo's design has been described as superb in its colossal simplicity. The piers are 55 feet apart, and there are only four great arches to support the nave. There is no triforium within and no pinnacles or flying buttresses without.

The foundation stones of the new cathedral were laid in 1295. Three years later, Arnolfo di Cambio was solemnly exempted from all taxation "by reason of his industry, experience and genius," and as a token that "The Commune and People of Florence, from the magnificent and visible beginning of the said work of the said church, commenced by the same Master Arnolphus, hope to have a more beautiful and more honourable temple than any other which is in the regions of Tuscany." Then there was a pause owing to lack of funds, until Giotto became master of the cathedral works in 1334. Painter, architect and sculptor, Giotto added a bell-tower to Arnolfo's design, decorating it with reliefs depicting human life in all its aspects. Commencing with the Creation, Giotto represented the various arts and crafts as symbolic of the various forms of human endeavour. The whole decorative scheme of Giotto's campanile was a sculptural discourse upon the civic virtues.

Then there was a further pause in the work upon the cathedral in honour of Santa Maria del Fiore, "Our Lady of the Florentine Lily." Let us utilise it to glance at another Florentine public work which testifies to the art activities of the Florentine guildsmen—Orcagna's shrine in Or San Michele, the granary of St. Michael, and the sanctuary which enclosed it. The shrine was commenced after the great Plague of 1348, and was intended to enclose a picture of the Virgin which had

won fame as a wonder-worker. A century before, the site of Or San Michele was occupied by a parish church dedicated to St. Michael the archangel. It was pulled down and a grain-market built in its place, where country-folk sold their corn and merchants did business in bad weather. For some reason a picture of the Madonna, which Ugolino da Siena had painted on one of the pilasters of the loggia, became endowed, in the popular mind, with miracle-working powers. A company of laymen called the Laudesi, or Singers of the Virgin, met every evening in the loggia to sing *laudi* in honour of the Holy Mother. In 1304, the loggia was burnt during a faction riot, but the pilaster survived the fire, and the sacred picture upon it naturally gained in popular estimation. In 1336, the municipality commissioned the Guild of Silk Weavers to rebuild the market.

Meanwhile the sacred picture remained in charge of the Laudesi. The plague of 1348—Boccaccio's plague—brought a great increase of wealth to the brotherhood, given by devotees who relied upon the succour of the Virgin Mother in this trial. A year after the plague, the Laudesi decided to expend part of their wealth upon changing the original loggia into a church, with a grain loft above. In addition the brotherhood decided to build a tabernacle for the sacred picture, the commission being given to the sculptor, Orcagna, who proposed a Gothic shrine adorned with statuary. The building still resembles a three-storied warehouse, but the church on the ground floor is redeemed by the windows and the sculptured niches which adorn it. The statues in the niches were given by the Florentine guilds, in honour of their patron saints, and are the work of such men as Donatello and Lorenzo Ghiberti. Donatello's "Saint George" was carved for a niche upon Or San Michele.

Still the Florentine Duomo was unfinished. After Giotto, there was a pause in the building operations until 1357, when the foundations were relaid on an even larger scale. Early in the fifteenth century, the great church was completed, with the exception of the dome. The cathedrals of Pisa and Siena had their domes, and the original design of Arnolfo di Cambio contemplated a dome as a crowning feature. Florence could not be behind its rivals.

RENAISSANCE ARCHITECTURE

It was in A.D. 1407 that Brunelleschi, the creator of the Renaissance style, became associated with the Florentine Duomo. In 1420, he was appointed architect to complete the dome. Twenty-five years later, at his death, it was finished, save for the lantern.

Brunelleschi was an artist of a very different type to the anonymous masters who built the Gothic churches of the Middle Ages. He was a scholar versed in classical tradition, a student of Dante and familiar with the science of his age, a master of perspective and geometry. Above all he was a man of affairs, quick-witted and intelligent—a

personality. The story goes that Brunelleschi, who was of low stature, was in the company of Pope Eugenius IV.

"Are you the man who can move the world?" asked the Pope.

The retort came on the instant, "Show me where to fix the lever and, at this moment, your Holiness shall see what I can do."

Renaissance architecture came into being when Brunelleschi left Florence on his first visit to Rome. Already a skilled goldsmith and sculptor, Brunelleschi spent several years studying Roman construction, measuring ancient buildings, searching out remains of classical detail and ordering his mind regarding methods of constructing vaults and arches. "Seeker after buried treasure," the Romans called him. The only existing Gothic church in Rome is the Dominican foundation of Santa Maria sopra Minerva, and Brunelleschi profited by the fact. Throughout the Middle Ages there was a bias in favour of Roman architectural forms throughout Italy, but nowhere was the prejudice more marked than in Rome. Brunelleschi, therefore, had less to unlearn than a French architect. Had Gothic art impressed itself upon the Romans as it did upon the peoples north of the Alps, the Renaissance in architecture must have been of much slower growth.

The greatness of Brunelleschi lies in the fact that from the first he did more than borrow Græco-Roman detail. He sought the underlying principles of the style he was studying, and grasped them so firmly that his designs had an organic vitality of their own. Brunelleschi followed Græco-Roman precedents, but from them he made new things. The dome of the Duomo owed much to the Roman example; it owed something to Gothic experiment; but it also had something in it that was individual to Brunelleschi. In this lies the secret of the Renaissance. It was a rediscovery of the satisfactions of classical art and life, but it was also a revelation of what liberty of thought and emotion could do for the individual. The artist learnt that he was possessed of a free and responsible personality, and a philosophy arose which interested itself in the earth. Architecture no longer desired to soar, unless a flower can be said to soar. Brunelleschi's invention, with its slender shafts and columns and its delicate mouldings and ornament, derived its easy grace from Mother Earth, as does the chrysanthemum or the dahlia, both things of art, but also things of earth.

The earliest religious building in the Renaissance style was the sepulchral chapel of the Pazzi, built by Brunelleschi in the cloisters of the Franciscan church of Santa Croce, where it also served as a chapter-house. Brunelleschi's portico occupies part of the loggia passage, and the little chapel derives its main proportions from this fact. The facade consists of a Corinthian portico of four bays, divided by a lofty arch leading to the chapel door. The dome and wagon-vaulting construction of the portico is repeated in the interior of the chapel on a larger scale. The classical columns are of the Corinthian order, somewhat stiffly carved, but the mouldings are very graceful, and the chapel is ornamented with sculpture by Donatello, Desiderio da Settignano and the della Robbias.

Brunelleschi's patrons in this chapel for the Franciscans were the

Pazzi family, infamous in later years for their association with the conspiracy to murder Lorenzo and Giuliano dei Medici. For the Medici family Brunelleschi designed the church of San Lorenzo. An earlier church, reputed to have been consecrated by St. Ambrose in A.D. 393, was destroyed by fire during a public service in which the Florentine Signoria invoked the help of St. Ambrose in their war with Filippo Maria Visconti. A new church, dedicated to St. Lawrence, was built at the cost of the Medici and seven other Florentine families. Brunelleschi furnished it with a small dome, but the interior was a basilica with a flat roof and vaulted aisles, ended by a transept. The rounded arches with an entablature above the column recall Brunelleschi's studies in classical architecture. The bronze pulpits and marble singing gallery by Donatello and Bertoldo, a marble tabernacle by Desiderio da Settignano, together with the Old Sacristy of San Lorenzo, recall that many diverse elements went to the finishing of a House of God in Renaissance Italy. Even more memorable is the Sacristy of San Lorenzo, with the tombs of the Medici, built by Michelangelo to the order of Popes Leo X. and Clement VII.

Lastly, there was the dome which Brunelleschi added to the Cathedral of Florence. He was forty-three years of age when he was appointed to complete Arnolfo di Cambio's church. Vasari tells that Heaven willed that Filippo Brunelleschi "should leave to the world from himself the greatest, the most lofty and the most beautiful construction of all others made in the time of the moderns and even in that of the ancients." The Florentine epigrammatist was even more outspoken in his praise. "The heavens are jealous of our dome," he cried, "which bids fair to rival the beauty of the blue ethereal vault itself." Michelangelo, who added the dome to St. Peter's at Rome, turned aside as he rode from Florence to gaze yet again upon Brunelleschi's work, saying that he could do nothing more beautiful. The Florentine dome was 133 feet high and 138 feet in diameter. It was raised upon a drum high above the three great semi-domes roofing the nave, the eight sides of the drum being each pierced with a window. Brunelleschi's dome is Gothic inasmuch as it is supported by eight main ribs and sixteen lighter ribs. But it is also a new thing which Brunelleschi devised and erected, though the lantern was not actually completed until 1461, and the bell-tower was only added by Andrea Verrocchio a generation later. Curiously enough, the dome has not been quite finished to this day. The pillared gallery which Brunelleschi intended to run round the base was only built on one side of the octagonal tower; seven sides still remain to be added.

Only an outstanding personality, living in an age of high sensibility, could have inaugurated such a revolution in art. The science accumulated by Brunelleschi made it possible for other architects to work in the classical style with confidence. He was followed by another student of Græco-Roman art, Leon Battista Alberti (1404-1472), who also spent a life-time in the study of arch and vault construction as revealed in the Roman ruins. Alberti's *De Re Ædificatoria* in ten volumes was an architectural classic for several centuries, and he was also a man of marked

personality, though without the energy and originality of Brunelleschi. Born in Florence, he was a member of the noble family of the Alberti and received a first-rate education. In middle life he worked in Rome for Pope Nicholas V. The circular chancel which Alberti added to the Church of SS. Annunziata, Florence, shows the influence of the Pantheon. Alberti also built the marble facade of Santa Maria Novella for Giovanni Rucellai. But his influence was due less to his achievements than to his writings and his personality. Vasari describes Alberti as "a person of the most courteous and praiseworthy manners, a friend of distinguished men, generous and kind to all, who lived honourably like a nobleman all his days." That the science of architecture should occupy such a man for a life-time is proof of the difference which the Renaissance had brought about in the builder's art. Once again the architect was an artist. Michelozzo (1396-1472), the architect of Cosimo dei Medici, Giuliano da San Gallo (1445-1516) and Andrea Sansovino (1460-1529) are other distinguished Florentines who carried forward the art and science of architecture in the fifteenth century.

The new position of the architect is shown by the fact that, in so far as it was architecture, a Renaissance church was the design of one man, uniform and symmetrical, and that it was intended to produce its effect as a whole. Other craftsmen and artists added grace to the purely architectural scheme, and these additions must not be forgotten. It may be that Renaissance architecture degenerated into a formal copying of Græco-Roman methods ; but, at his best, an Italian architect did not take over Græco-Roman methods as he might a second-hand doublet. For that reason we do not say of his buildings, " How classical they are !" Rather we say, " How individual they are !" Instead of a nation co-operating in building a co-ordinated series of churches, as the French of the Middle Ages had done, a number of city-states gave their encouragement to the efforts of individual artists.

The Renaissance architect did not face the problems of lintel construction or the rounded arch and dome for the first time, as the Greek and Roman had done. For that reason, he was less interested in the logic of design which was an obsession with the Greek and, accordingly, structure was not emphasised. Instead the Italian took the classical column, pilaster, cornice and other elements and strove to build them into new combinations of line and mass, light and shade, which should seem beautiful to the eye. It was the unity and novelty, not the logic, of his scheme which pleased him. Architectural design became a conscious aesthetic effort, not the solution of an architectural problem according to certain definite laws as in Greece, or the speedy carrying out of an engineering scheme as in Rome, or the gradual evolution of a significant thing, following upon experience, failure and success, as a great church tended to be in Romanesque and Gothic times.

During the fifteenth century the democratic basis of Florentine life tended to decline ; the democratic Guild of Wool-Workers was superseded in political affairs by the Guild of Cloth-Workers, which was wholly composed of capitalists, and occupied itself with financing the importation and sale of cloth rather than its manufacture. An aristocracy

of merchants replaced the earlier democracy. Fortunately for art, what was lost in the direction of political freedom was gained in the far-sighted control of the art fund. The political discontent enabled Cosimo dei Medici to establish himself in control of Florentine affairs, while the wealth of the Medici enabled Cosimo to pass on his power and popularity to his son and grandson. Lorenzo the Magnificent, who took up the reins of Florentine government in 1469, became a patron of art comparable with Pericles of Athens, so that the bottega system of training was, in part, superseded by the school in the Casino Mediceo, near San Marco, with its bursaries for poor students and its remarkable collection of classical remains. Here Andrea Sansovino and Michelangelo were educated. Lastly, for a generation after 1450 Italy enjoyed an unwonted peace. As Guicciardini wrote :

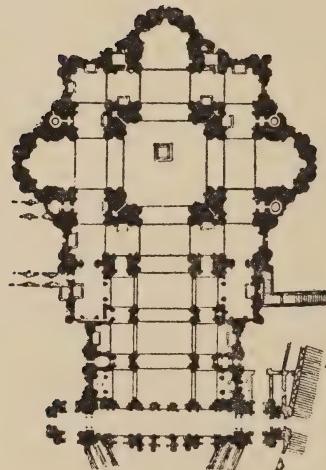
"The people had taken advantage of this halcyon season and been busied in cultivating all their lands, as well as mountains and valleys ; and, being under no foreign influence, but governed by their own princes, Italy not only abounded with inhabitants and riches but grew renowned for the grandeur and magnificence of her sovereigns, for the splendour of many noble and beautiful cities ; for the seat and majesty of religion, and for a number of great men of distinguished abilities in the administration of public affairs, and of accomplishments in art and science."

Nor was it a matter of Florence alone. In the middle of the fifteenth century, all the leading Italian states entered upon a period of peace and prosperity. In 1447, Nicholas V. restored the papal court to Rome after the period of Papal exile at Avignon and Florence. In 1450, Francesco Sforza conquered and pacified Milan. Eight years earlier Alfonso of Aragon had won the kingdom of Naples, while, in the early part of the fifteenth century, Venice had acquired sufficient coast land to make her island possessions secure. After generations of political instability, Lorenzo the Magnificent, Ludovico of Milan and Ferdinand of Naples established a temporary balance of power, which served to keep Venice and the Papacy at peace ; at other times the alliance took the form of Milan, Venice and Florence against the Papacy and Naples.

When Lorenzo the Magnificent died in 1492, the curb upon the ambitions of Naples and Milan was withdrawn. Ludovico invited Charles of France to attempt the conquest of Naples. The invitation resulted in the conquest of Milan. Milan commanded the passes into Germany, so its occupation by the French hampered the efforts of the Holy Roman Emperor to interfere in Italian affairs, and the Emperor Charles V., when he came to man's estate, was not slow to accept the challenge of France. Once more Northern Italy was the battle ground upon which great European princes decided their quarrels ; political and economic chaos replaced the social order established by the tyrants and preserved for a generation by the guile of such men as Cosimo dei Medici or Lorenzo. No longer was Italy governed by her own princes. After years of political stress, the Florentines expelled the Medici, and by 1530 were standing a siege by the forces of the Pope and Emperor. While

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Michelangelo was devising the defences of San Miniato hill he was working upon the tombs in the New Sacristy of San Lorenzo. When the Medici were forcibly restored to Florence, Italian independence was lost. The free burghers who had built the Duomo and San Michele and spurred Brunelleschi to complete his dome, were forced to acknowledge the rule of a selfish nobility, which could claim neither the wisdom of Cosimo nor the diplomatic success of Lorenzo the Magnificent. The era of the city-states had ended, but in death, it passed on the tradition of architecture which it had created to Rome and the Popes at Rome.



ST. PETER'S, ROME

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CHAPTER XVI

THE PAPACY AND THE ART FUND

It was fortunate that other Italian communities had prepared themselves to take up and carry on the Florentine architectural tradition. If the Renaissance movement had been confined to Florence the loss to the world would have been great. The disasters which followed the death of Lorenzo the Magnificent in 1492, brought it about that Florentine science and skill were at the service of any community which cared to bid for them. In particular, Florentine art was ready for the service of the Papacy at Rome. Unlike the Florentines, the burgher class in Rome did little to encourage art. It was the Pope, the cardinals and bishops, who were the builders and art patrons.

At the end of the fifteenth century the ideals of the Age of Faith had changed. After A.D. 1250, the belief in the joint rule of an all-powerful Emperor and an all-wise Pope gradually weakened. It was destroyed by the so-called "Babylonian Captivity" between 1308 and 1376, when the Popes were exiled at Avignon. Philip the Fair of France had defied Boniface VIII. and countered his claim to be set over the nations and kingdoms, "to root out or to pull down; to overthrow, to build and to plant." The captivity at Avignon followed. While it lasted art effort in Rome lapsed.

A change came when the anti-pope at Avignon was condemned and Otto Colonna (Martin V.) came to the throne of St. Peter in 1417. There was a pause during the troubled reign of Eugenius IV., a Pope who spent nine years in Florence, at a time when Brunelleschi, Ghiberti, and Donatello were working. Once more established in Rome, the Popes recognised the failure of the effort to enforce a spiritual despotism and Nicholas V. determined upon a new policy. He sought to make the Pope a King and the Papal Court a centre of European culture. Aided by the wealth poured into the papal coffers during the jubilee of 1450, Nicholas determined that the seat of the Papacy should be as splendid as Augustan Rome had been in the time of the Cæsars, whose authority he meant to emulate.

It was natural that the fifteenth century Popes sought the aid of Florentine artists in carrying out their schemes. While Pope Eugenius was at Florence, he sent Antonio Averlino to add a worthy gateway to the Basilica of St. Peter; the new gates were set up in 1445. In the first half of the fifteenth century, much Renaissance work was done in Rome by architects and sculptors from Florence. Nicholas V., who had been a protégé of Cosimo dei Medici, and had lived in Florence, engaged the Florentine Rossellino to repair and enlarge St. Peter's.

Nicholas V. died in 1455 and in 1458 came Pius II., a typical Pope

of the Renaissance, who chose his very name, Pius, because of its associations with Virgil's Aeneas. Bishop Creighton has described Pius II. as a Gil Blas. Under his leadership, the Catholic Church was severed even more completely from the earlier faith. Religious festivals became "games" of the sort Roman leaders had devised for the amusement of the Roman plebs. Yet even Pius II. could be provoked to a service for religious art upon occasion. He set Isaia da Pisa and Paolo Romano to work upon the famous tabernacle, prepared for the skull of St. Andrew, which Thomas Palæologus brought to Rome from Morea. Three cardinals met the relic at Narni and brought it, on Palm Sunday in 1462, across the Ponte Molle, where a small shrine marks its first resting-place south of the Tiber. Thence the Pope headed a procession of a thousand priests in white, along the Via Flaminia to the Church of the Popolo, where it rested for a night. Next day, Pius II., who had watched it all night, carried the relic to St. Peter's, bearing it barefooted through the streets, followed by 30,000 candle bearers. Fragments of the tabernacle can still be seen in the crypt of St. Peter's. Isaia's tomb of Eugenius was one of the earliest Renaissance tombs in Rome, though the present figure of the Pope is by another sculptor.

The Florentine artistic invasion of Rome, apart from short visits by Donatello and Mino da Fiesole, reached a climax at the end of the fifteenth century and in the early years of the sixteenth century, when the Sistine Chapel in the Vatican was being decorated. Like Pius II., Sixtus IV. was a worldly Pope. He was a son of a shipman at Savona, yet, in thirty years, his family gave two Popes and seven cardinals to Rome, as well as bishops, abbots and men of secular authority. But, for all his spiritual disabilities, Sixtus IV. was a man of culture and a builder of renown. The Sistine Chapel was built for him by the Florentine Giovanni dei Dolci, and was decorated by Cosimo Roselli, Perugino, Botticelli, Ghirlandaio and Signorelli. Sixtus IV. also built the churches of Santa Maria del Popolo and Santa Maria della Pace in Rome.

Pope Julius II., who finally inaugurated the rebuilding of St. Peter's, was at least as earthly in his ideals as his uncle, Sixtus IV. Indeed, Julius was the equal of any monarch in Western Europe in the secular character of his ambitions. He led the papal army into Bologna in November, 1506, and was hailed as a warrior, the equal of his namesake, Julius Cæsar. In the following March the Pope celebrated a triumph as though he were in very truth a Roman Emperor. Leo X. (Giovanni dei Medici), who became Pope in 1513, emphasised the secularisation of his office, when he cried, "Let us enjoy the Papacy since God has given it to us."

It would have been strange if such men as Julius II. or Leo X. had thought of building a vast Gothic cathedral in Rome as the House of God, which was to embody the association of the Papacy with the power and authority of the Roman Empire. Size, breadth of design, sumptuous grace and rich delicacy of detail, made possible by the Renaissance style, were far closer to the ideas of the sixteenth century Popes. Already the Florentine architects and sculptors had proved their worth in all parts of Northern Italy, including Milan and Venice. Michelozzo

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ST. PETER'S, ROME





ST. PETER'S, ROME : MICHELANGELO'S DOME

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STA. MARIA DELLA SALUTE, VENICE

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Giraudon

THE CHURCH OF THE SORBONNE, PARIS

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in 1462, had built the Capella Portinari in the Church of San Eustorgio, Milan. Even more important was the employment given to the Florentine Bramante by the Dukes of Milan. It was his good fortune to be employed by Julius II. for the rebuilding of St. Peter's and to be assisted in the work by architects trained in the Florentine tradition, such as Antonio Sangallo (1485-1546).

Donato Bramante da Urbino had the same birthplace as Raphael. He was born in 1444, and learnt painting under Mantegna, at Mantua, where he seems to have come under the influence of Alberti, who was building the church of St. Andrea there in 1472. From about 1476 to 1500, Bramante was in the employ of the Milanese. In 1492, he was at work in the abbey church of Santa Maria delle Grazie at Milan. Santa Maria, near San Satiro, is also his design. About 1500, Bramante came to Rome and worked upon the choir and cloister of Santa Maria della Pace for Cardinal Oliviero Caraffa. The cardinal introduced him to Pope Alexander VI. A charming evidence of Bramante's work in Rome is the little domed temple in San Pietro in Montorio, built at the cost of Ferdinand of Spain on the spot where St. Peter was supposed to have suffered martyrdom. It is a small circular building, fifteen feet in diameter, surrounded by sixteen columns of grey granite, and recalls the small Roman circular temples. When Julius II. determined to rebuild St. Peter's, he made Bramante architect in chief.

Bramante's design never reached actuality. The architect had ingenuity and experience in plenty, but high originality and abounding energy were required for the rebuilding of St. Peter's. Size was a prime essential; grandeur and dramatic impressiveness were other necessary qualities. Bramante was capable of satisfying a scholarly connoisseur, but his insight into classical proportion, his sense of grace, and his happy reticence in decoration were not the qualities required to impress the pilgrims of Christendom who would crowd into the Eternal City during a jubilee year. Towards the new St. Peter's Bramante contributed the idea of combining the lintel architecture of Greece with the round arch and dome of Imperial Rome, but the church itself was not built until the Popes called Michelangelo to their aid. (See plan on page 256.) In a sense the vision of the painter-sculptor inspired the scheme of St. Peter's from the beginning. Michelangelo had been commissioned to design a sculptured mausoleum for Julius II., and suggested a vast marble memorial symbolical of the victory of human energy over death. On the lower tiers, figures of the Arts and Sciences; above, the Prophets and Graces; the apex of the design was to be a group in which the powers of earth and heaven upheld the open tomb where Julius II. would await the Resurrection Day. The basilica, as rebuilt by Nicholas V., was not large enough for Michelangelo's monument, and Julius asked what would be the cost of rebuilding. "One hundred thousand scudi," said the sculptor. "Let it be 200,000," said the Pope. As a fact, St. Peter's eventually cost something like 50,000,000 scudi (£10,000,000).

Bramante's design for St. Peter's was a Greek cross, crowned by a great dome raised on four piers, which should embody the Roman idea of majestic spaciousness and unity and replace the upsoaring spire

or tower of a Gothic exterior. When Bramante died in 1514, however, little was done beyond building the four central piers with the massive arches above them which were to be the basic feature of the design. Troubled times in Northern Italy, and such an episode as the plundering of Rome by the troops of the Emperor Charles V., stopped the work for a generation. It was not until the time of Paul III., the last of the long line of Renaissance Popes, that real progress was made. He commissioned Michelangelo to continue rebuilding St. Peter's regardless of cost. The sculptor-painter was seventy-two years of age, but he had lost none of his driving force. His titanic energy left only the eastern facade to be finished by his successors, his principal achievement being the building of the dome, "raising," as he said, "the Pantheon in air." The lantern of St. Peter's is 405 feet above the ground, the full height of the church being 448 feet, compared with the 384 feet of St. Paul's. The drum was finished when Michelangelo died in 1564, at the age of eighty-nine, and the dome was raised upon sixteen ribs of stone from his model. Moreover, Michelangelo's example was so potent that the work upon St. Peter's continued until 1601, and so reached completion. Bramante's original Greek cross plan was modified by the addition of two piers to the nave, giving the church a Latin cross form, and the facade was modified to the detriment of the dome, but, in the main, Michelangelo's scheme was carried through. There is no triforium or clerestory in St. Peter's; only a gigantic semi-circular vault raised upon mighty pillars. Though the nave is 300 feet long, it has only four bays, each bay being 75 feet wide. What this means may be gauged from the fact that if St. Peter's had had a proportionate number of bays to Westminster Abbey, there would have been fifteen bays in the 300-foot nave. So vast is the scale that it is some time before the spectator realises that the area of St. Peter's is 18,000 square yards, twice that of St. Paul's, London.

The dream of pride which Michelangelo brought to earth for the great Popes in the sixteenth century was completed in the following century, when Bernini (1589-1680) added the four-fold colonnade which encloses the Piazza of St. Peter's—a majestic threshold upon which all Rome could gather before entering Michelangelo's House of God. Within the church Bernini built the amazingly clever bronze baldachino over the high altar and the tomb of St. Peter, 95 feet in height. The very cherubs who bear the holy-water stoup are 10 feet high. Bernini cast the baldachino from the bronze gates of the Pantheon, a piece of vandalism of which the Roman wits said "*quod non fecerunt barbari fecerunt Barberini*"—the jest being at the expense of Maffeo Barberini, the Pope who commissioned the baldachino. Bernini also designed the bronze chair of St. Peter, supported by the fathers of the Church, St. Augustine, St. Ambrose, St. Chrysostom and St. Athanasius. Bernini's influence, too, was paramount in the colossal statuary decorating the nave and cupola of St. Peter's. Restless and mannered, pretentious and sensational, the baroque art of the seventeenth century has qualities which a cultivated judgment may understand, but cannot justify. The religious architecture and statuary of the age alike are alive

with emotion, and are animated with the passion which carried the Roman communion through the testing time of the Counter Reformation. This fervid activity of spirit shows itself in another form in Bernini's "Santa Theresa," in the church of St. Maria della Vittoria, Rome, built by Paul V. in 1605 for the barefooted Carmelites. Here Bernini represented the Saint sinking back in an ecstatic swoon before the stroke of the angel, who is wounding her with the arrow of divine Love. Crashaw found expression for the emotion in poetry :

" O how oft shall thou complain
Of a sweet and subtle pain !
Of intolerable joys !
Of death in which who dies
Loves his death, and dies again,
And would for ever so be slain."

The poet succeeded, but the effort was more than the chisel of Bernini could accomplish. Before the spiritual transports of the writer of *The Conceptions of the Love of God* could be expressed in marble, a nicety of taste was required which Bernini and his followers never acquired. It was sacrificed to enthusiasms generated by the belief that their art was forwarding a great ideal. In this lies the justification for baroque art. If æsthetic values alone had any validity, it would be admitted that later Italian architecture and statuary witness to qualities which are satisfying on the physical rather than the intellectual plane, and, in so far as they are spiritual, fail to raise the beholder to the heights achieved by the Greek, the Gothic or the Renaissance artist. In the early centuries of the Italian Renaissance, art witnessed to a harmony which the men of Pisa, Florence and elsewhere found in their city-state. When the baroque age was reached, religious architecture and sculpture testified to the energy of a mighty organisation. In its proud march for power Rome had sacrificed not a little of the beauty enshrined in the faith of which St. Peter's is the central memorial.

Apart from Bramante, Michelangelo and Bernini, the chief architects of the late Renaissance and the Catholic Reaction were Peruzzi (1481-1563), Giacomo Barozzi (Vignola) (1507-1573), Maderna (1556-1629), Sanmicheli (born 1484) and Borromini (1599-1667). Baldassare Peruzzi was born at Siena and became an assistant of Bramante. Trained as a painter and a Grecophile by instinct, he belongs to the Renaissance proper, and his best work was distinguished by simplicity, beauty of proportion and delicacy of decoration. Michele Sanmicheli came to Rome from Verona about 1500, and the Capella Pellegrini in the Church of San Bernardino, Verona, is an example of his religious architecture. Vignola tended to be a follower of Peruzzi, a student of academic achievement, whose close following of precedent resulted in a certain coldness and formality of design. Francesco Borromini was a Milanese with the energy of his Lombard forefathers. In so far as these architects followed the Renaissance traditions, they based their designs on the "classic orders" as described by the Roman Vitruvius. The proportions and decoration differed according to the taste of each

master, but the classical idea was the dominant factor. After Michelangelo, came the change (the word "declension" is to be deprecated) to baroque, the architecture of the Counter Reformation. In the main, the architects and sculptors followed Michelangelo, but without the restraint which the Florentine had learnt in the garden-studio of the Medici. St. Peter's, indeed, was a triumph of energetic power, but, in other works, such as the New Sacristy of San Lorenzo, Michelangelo suggested to the lesser men who followed him a system of design in which there was a marked absence of truthful construction and logical articulation. Exaggerated scale, false windows and other features were employed, regardless of canons which had been recognised by earlier builders in the classic style. Broken cornices, double and triple pediments, screw-twisted columns, scrolls and massy volutes were added, until architecture exchanged theatrical effectiveness for the lucid logic which had been its outstanding virtue. Stucco was painted to represent marble, and false joints were freely introduced to suggest massive masonry where, in truth, small stones had been used.

Renaissance and baroque architecture are fortunate in having provided the theme for Mr. Geoffrey Scott's essay *The Architecture of Humanism*, perhaps the most vital contribution to the æsthetics of architecture since Schopenhauer's essay in *The World as Will and Idea*. Very skilfully Mr. Scott explains and defends these innovations. He argues that the essential discovery of the Renaissance architects was that the ideals of structure and the ideals of decoration in architecture are separable and not aspects of a single thing. He urges that for certain purposes in architecture "appearance" is all-important, but it is not essential that structural conditions should themselves produce "appearance." Granted a refined sense of proportion and purity in decorative detail, an architect may well seek graces which are practically independent of constructional requirements. If a building "looks" vigorous, it is sufficient; it need not be vigorous. In many directions the architects of the Italian Renaissance solved problems for later ages. They showed how the masses of a design can be made more telling by duplicating and re-duplicating parts; they made the wall a noble element in architecture. Mr. Scott, in a happy passage, justifies the addition of pilasters to a wall on the ground that the Renaissance architects from Brunelleschi to Palladio expressed the ideal properties of a wall through its decoration. "A wall is based on one thing and supports another, and forms a transition between the two, and the classic orders, when applied decoratively, represented an ideal expression of these qualities, stated as generalities." Doubters will suggest that Mr. Scott's arguments tend to justify an architecture of the stage, an art which satisfies when the footlights are glowing, but not under the more searching tests of daytime and sunshine. And, indeed, it is the theatrical element in baroque sculpture and architecture which condemns it, if the word must be used of a human effort which so triumphantly served its purpose.

The chief patrons of baroque art on its religious side were the Jesuits. As Giotto had allied painting and sculpture with the Franciscan House

of God, so the architects of post-Renaissance Italy allied building and decoration with the purpose of Ignatius Loyola and the Company of Jesus. When the Renaissance reached its height, the occupant of the Papal chair was little more than a player in the game of international politics. He became a counter when the soldiers of Charles V. sacked Rome in 1527. Papal policy was placed upon sounder lines after 1540, when Paul III. sanctioned the Company of Jesus, an instrument which was very effective in the hands of Caraffa and later Popes.

Ignatius Loyola died in 1556 and in 1575 the church in which he had preached was rebuilt at the cost of Cardinal Alessandro Farnese, after designs by Vignola. To-day, the church is known as The Gesu, and its domed-hall proved to be the model for baroque church architecture, and thus ended the purely Renaissance phase of the Classical Revival. The body of the founder of the Jesuit Order lies in an urn of gilt bronze, under an altar in the left transept, the chapel being decorated with lapis lazuli and gilded bronze—*ad majorem Dei gloriam*. The followers of Loyola were wise in their understanding of men. The intellectual significance of the classical orders interested them not at all, but they had no intention of abandoning anything which was alluring in paganism, any more than they abandoned any attraction in Christian faith or doctrine. Not for them the slow building method of the Gothic age—experiment, failure, repair and, at last, temporary success. The Renaissance style was well tested, and offered speedy building. Magnificence of scale impressed the uncritical many. A few massive piers were less costly to build than a number of smaller ones. The open spaces in the nave and crossing were also desirable for congregational purposes, and left the high altar plain to view. The Renaissance style, as developed by the baroque artists, afforded opportunities for dramatic contrasts of light and shade, and suggested the self-confident authority of those who built it. Above all, the style was regarded by the public as “up-to-date.” Students familiar with the lore expounded in Vitruvius’s “*De Architectura*,” and the books of Alberti, Vignola and Palladio, which followed, might know that the new building method was Græco-Roman in origin, but to the public the style was Italian, and Italian of the sixteenth and seventeenth centuries.

At the end of the sixteenth century ideas and reputations travelled readily; craft knowledge and technical skill were common, and the transport of material was relatively easy. The baroque style in architecture and sculpture passed to all parts of Italy and thence over the world. At first the Jesuits favoured churches of circular or octagonal shape, but the needs of large congregations soon necessitated naves and aisles. For their exteriors, the Jesuits favoured a facade two orders high in the centre and one order high on each side, masking the nave and aisles respectively. The Church of SS. Annunziata, at Genoa, belongs to the end of the sixteenth century and was built by Giacomo della Porta. Marble columns of large scale, inlaid on the flutings with another marble, carry the pier arches. The design of SS. Annunziata recalls that by A.D. 1700 the only school of architecture in Italy was derived from Rome, and expressed the political and cosmopolitan ideals of the

capital rather than ideas evolved in Pisa, Florence, or the city-states in which the neo-classical ideals and ideas were evolved. Baroque will be accepted or rejected as one prefers the ideals of the North Italian city-states to those of Rome and the Papacy. Call the baroque magnificent or ostentatious, pretentious or stately, empty or sublime : that is a matter of personal opinion. But, after all, it is more important to understand. In this case understanding means linking baroque with the work of the Roman Church at the time of the Catholic revival, and Rome's wondrous success.

VENETIAN ARCHITECTURE

Renaissance architecture was slow to reach Venice, and the Jesuits never secured the authority there they attained in other parts of Italy. Indeed, the Order was expelled from Venice in 1606. A blend of Gothic and Byzantine architecture persisted in Venice until the new Italian style was introduced from Florence and Milan by the Lombardi and Sansovino of Florence. This was about 1470 or 1480, fifty years after Brunelleschi had built the Pazzi Chapel. Like Rome, Venice was a collector rather than a creator of architects.

The change came at a crisis in Venetian history. During the fifteenth century Venice had extended her rule into Lombardy. By capturing such towns as Vicenza, Padua, Verona and Brescia, she extended her territory to the very gates of Milan. This apparent success sealed the military fate of the Venetian republic, for Genoa had also been humbled and Venice had to hold the Mediterranean by her own power alone. The double burden proved too much for the Venetians. On the Italian continent, Venice was faced with foes who could strike and strike hard. Such were Mantua, Ferrara and Milan. The fall of Constantinople should have been a warning when war with the Turks threatened in 1463. Thirty-six years later, the Vizier at Constantinople cried to the Venetian ambassador :

“ You can tell the Doge that he has done wedding the sea. It is our turn now.”

Finding her island possessions in the Eastern Mediterranean less secure, Venice pursued her policy of Italian aggrandisement. In 1508, she completed the circle of her foes by coming into conflict with the Papacy. Venice equipped mercenary armies, but Julius II. replied by organising the League of Cambray. By 1510 Venice had lost all her continental territory.

Yet the material losses of Venice proved to be her spiritual gain ; her shame was her great glory. The loss of her mainland possessions and a period of peace with Turkey gave Venice an opportunity for cultivating the arts. It was when her wealthy merchants had retired from active trade, when her leaders were no longer concerned with the acquisition and administration of new territories, that the architects of Venice had their supreme opportunity. When the Doge's Palace was

burnt in 1577, fifteen architects were called in to repair the damage and the decoration was commenced afresh with a new body of artists. Churches, guildhalls, vast tombs and palaces, all furnished opportunities for architects versed in the new Italian style. One of the earliest churches in the new manner was Santa Maria dei Miracoli, designed by Pietro Lombardo. It included a cupola above a raised chancel, richly decorated with inlaid coloured marbles. Venetian architecture also owed much to Andrea Palladio of Vicenza, a student of classical art as indefatigable as Alberti, and also an architect of high gifts. In 1549, Palladio proved his skill by building an arcade around the Gothic Town Hall of Vicenza, an attempt to reproduce the Basilica Julia of the Roman Forum. This arcade was of stone, unlike most of Palladio's building at Vicenza, which were of cheap material such as wood, stucco or brick. In spite of poor material, Palladio was able to endow the building with noble appearance by virtue of well-spaced design. His outstanding gift was his fine perception of the value of space. In Venice, Palladio was responsible for the church of San Giorgio Maggiore (1565) and the Chiesa del Redentore, the latter, one of the richest and most stately interiors in Renaissance art, the clustering of the pillars under the dome being specially happy. Nor is the impressiveness of the design due to a grand scale. The nave of the church of the Redeemer is only 52 feet wide.

Palladio's church of the Redeemer was built in 1577 as a votive offering after the plague of 1576, in which 50,000 Venetians lost their lives. The lovely church of Santa Maria della Salute, at the head of the Grand Canal, was also built as a national thanksgiving after a time of pestilence, in which 46,000 people died in Venice itself, and 94,000 in the lagoons. During the epidemic the Republic vowed a church to "Our Lady of Health" and, between 1631 and 1682, it was built in the Renaissance style by Longhena, a pupil of Palladio. Santa Maria della Salute is an octagon with eight chapels, the central space being covered by a circular dome. Behind is a second dome and small bell-towers, the whole making one of the most picturesque exteriors in church architecture, which is the more charming because of its situation in the Venetian lagoons. Longhena gave height to his central dome by raising it above an inner shell of brick which carries the lantern, and the line and mass are almost as delightful in memory as in actual experience, lit by the azure of the Venetian sky and sea. In a memorable passage, Mr. Scott justifies the various architectural elements of Longhena's church.

"The sweeping movement suggested by the continuous curve of the Grand Canal is brought to rest by the static mass of the church that stands like its gate upon the sea. The lines of the dome create a sense of massive bulk at rest; of weight that loads, yet does not seem to crush, the church beneath; as the lantern, in its turn, loads yet does not crush the dome. The impression of mass immovably at rest is strengthened by the treatment of the sixteen great volutes. These, by disguising the abrupt division between the dome and the church, give to the whole that unity of bulk which mass requires.

Their ingenious pairing makes a perfect transition from the circular plan to the octagonal. Their heaped and rolling form is like that of a heavy substance that has slidden to his final and true adjustment. The great statues and pedestals which they support appear to arrest the outward movement of the volutes and to pin them down upon the church. In silhouette the statues serve (like the obelisks of the lantern) to give a pyramidal contour to the composition, a line which more than any other gives mass its unity and strength."

The neo-classical style did not minister in any marked degree to mystical feeling, but the achievements of the Renaissance architects in Venice, whether in the restrained manner of Palladio, or the fantastic mood of Longhena when he designed the church of Our Lady of Health, show that it had a value in emphasising the romance of a world-wide communion, even if it lacked the spiritual appeal which speaks from a church of the Gothic prime. By virtue of these qualities of pomp and romance, the Græco-Roman style as modified by the Italians has persisted to our own day and will persist.

Even in the days of Palladio, still more in those of Longhena, the social and political circumstances which brought about the classical revival were passing. The fall of Constantinople in 1453 was the beginning of the end, though the end was long deferred. Italy's real danger was the closing of the trading routes to the East, which led directly to the discovery of America, and of the Cape route to India by Vasco da Gama.

Against the Portuguese, the Venetian merchants held their own in the Eastern trade, but they found rivals of sterner stuff in the Dutch. In 1656, the Dutch secured Ceylon. In earlier times the difficulties would only have persuaded the Venetians to combat them. Now a milder race inhabited the islands of the lagoons. A hundred years or so later came Napoleon, and the end. In 1797 the reigning Doge burnt the Golden Book of the Venetian Republic, and handing his ducal cap to an attendant, said : "Take it away. We shall not want it again." And what was true of Venice was true of Italy also. The glory of the city-states had long gone ; they had neither the power nor the desire to build communal churches, and criticism passed from the public to the priest. As Mazzini cried :

"The Pope clutches the soul of the Italian nation, Austria, the body, whenever it shows signs of life ; and on every member of that body is enthroned an absolute prince, viceroy in turn, under either of those powers."

In Northern Europe men had accepted the teaching of Luther that "all Christians are priests," and accordingly came to the conclusion that they had the right to say in what kind of church God might best be worshipped. The student of religious art therefore moves northward once more, and takes up the story of the House of God where he left it when the Perpendicular style was superseding the art of the Early English and Decorated periods and architecture tended to identify

itself with the ruling monarchy. The taste for Gothic declined until, in the eighteenth century, such a man of taste as Addison could write :

"A monstrous Fabrick built after the Gothick manner and covered with innumerable Devices in that barbarous kind of sculpture."

This was also the case in France. After the time of Louis XI., architecture was more and more closely associated with the ruling classes and the court, and the mystic urge was replaced by a secular impulse, as it had been in Renaissance Italy. Thenceforward, architects were concerned with the translation of the ideas of Alberti and Palladio into a French idiom, until the Renaissance manner was as familiar to the north of the Alps as it was in the south.

CHAPTER XVII

POST-REFORMATION ARCHITECTURE : FRANCE AND ENGLAND

Zola once defined art as the world seen through a temperament. If this be true, the House of God in post-Reformation times reveals a very different world, or a very different temperament, from that disclosed by a Gothic church. Western Europe did not lose its capacity for church-building when the break with Catholic tradition in the sixteenth century divided Christendom. But it cannot be denied that churches built for worship under the reformed faith failed to express the whole life of the community as the earlier House of God had done. There were material reasons for this. After 1520, princes, parliaments, municipalities and individual capitalists took over many functions from the Church and shared resources which had once been controlled by the Church alone. The cessation of the habit of pilgrimage and the suppression of chantry-chapels deprived church-builders of assured sources of income, and the dissolution of the monastic houses and hospitals connected with them diverted to secular channels money which had been available for religious building in an earlier age. Whereas Catholicism had encouraged a richly sensuous and imaginative art, the puritan mood of the Reformer tended to discourage the art associations of religion. Whereas the Roman Catholic was a creator and preserver of symbolism and the objects in which symbolism was enshrined, the Lutheran was an iconoclast. There were moderate Lutherans who protested against the destruction of pictures and statuary. Dürer urged that a Christian would no more be led to superstition by a picture or an effigy, than an honest man to commit murder because he carried a weapon by his side. But the tendency remained. Instead of the House of God being the symbol of an undivided faith throughout Christendom, it was evidence of political differences between nations and classes ; where the struggle between Roman Catholicism and the Reformed Faith was keenest, iconoclasm was most general.

An example will suffice. In the sixteenth century Antwerp was the most prosperous city in the Spanish Netherlands. Capitalists such as the Fuggers were established there and 5,000 merchants met in the Bourse daily. The merchant-guilds and the clubs of the civic militia had their chapels in the Cathedral of Notre Dame. Founded in 1124 and rebuilt in the fourteenth century, Motley said of the interior that the penitential tears of centuries had incrusted it with their glittering stalactites, so numerous and so precious were the jewelled art objects. Notre Dame was desecrated and despoiled during the image-breaking

which followed the field preaching of 1566. A Protestant mob invaded the cathedral and drove the warders from the Treasury. As night fell, the rabble dragged the image of the Virgin from its place, plunged daggers into the inanimate body, tore off the jewelled and embroidered robes and broke the figure into a thousand pieces.

" Every statue was hurled down from its niche, every picture torn from the wall, every painted window shivered to atoms, every ancient monument shattered, every sculptured decoration hurled to the ground. A colossal and magnificent group of the Saviour crucified between two thieves adorned the principal altar. The statue of Christ was wrenched from its place with ropes and pulleys, while the malefactors, with bitter and blasphemous irony, were left on high. A very beautiful piece of architecture decorated the choir—the repository as it was called—in which the body of Christ was figuratively enshrined. This rested upon a single column, but rose, arch upon arch, pillar upon pillar, until lost in the vault above. It was now shattered into a million pieces. The statues, images, pictures, ornaments, as they lay upon the ground were beaten with sledge-hammers, hewn with axes, trampled, torn and beaten into shreds. A troop of harlots, snatching waxen tapers from the altars, stood around the destroyers and lighted them at their work."

What was done in the Church of Notre Dame at Antwerp, was typical of the destruction over a great part of Northern Europe. On the night the cathedral was pillaged, thirty churches were sacked in Antwerp. Within a few weeks 400 churches were plundered in the province of Flanders alone. In Switzerland, under Zwingli, the majority in each village was allowed to keep or destroy images as they pleased. In Denmark, where Lutheranism was the dominant mood, iconoclasm was not so general; to this day many a Danish church retains its ancient altar table and reredos. In Sweden, under Gustavus, the monasteries were deprived of their property or suppressed; but, in general, the change from Romanism to Protestantism was not violent, and the mood of the reformers was Lutheran rather than Calvinist.

In England and Scotland the destruction continued for the greater part of a century. On the night of St. Barnabas Day, 1550, the high altar in St. Paul's Cathedral, London, was torn down and a holy table set up. On October 24th, other altars and chapels were demolished, together with any tomb which had served as a shrine during the Middle Ages; the Rood, with its statues of the Crucified Saviour, the Virgin Mother and St. John, was cast down. Everywhere pictures and missals were destroyed or sold, while many paintings on the walls were whitewashed over and windows broken on the ground that they contained "superstitious pictures." Treasures from English churches were taken to Catholic countries overseas by the shipload; examples may still be found in Spanish churches and monasteries. What public fanaticism spared, generally failed to escape the rapacity of the Crown or individuals. Froude tells that the halls of English country houses were often hung with altar-cloths and beds were quilted with copes.

Lastly, there were the shrines of the great English saints, which had been centres of pilgrimage. After the shrine of Thomas of Canterbury, perhaps the most revered object in England was the image of Our Lady of Walsingham, in the Augustinian Priory in Norfolk. Henry VIII. had made a pilgrimage to Walsingham barefoot. Yet the image of the Virgin was brought to London in 1537 and burnt. Latimer tells that "Our gret Sibyll, with her old syster of Walsyngham, her younge syster of Ipswych, with the other two systers of Dongcaster and Penryess wold make a jooly mustere in Smythfith ; they wold not be all day in the Burnynge." The mood in which such desecration was carried out may be judged by extracts from official orders dating from the time of Edward VI.

(3) "That Images abused with Pilgrimages, and offerings thereunto, be forthwith taken down and destroyed ; and that no more wax candles or tapers be burnt before any image, but only two lights upon the High Altar before the Sacrament shall remain still, to signifie that Christ is the very light of the world."

(28) "That they take away and destroy all shrines, coverings of shrines, tables, candlesticks, trindills, or rolls of wax, pictures, paintings and other monuments of famed miracles, so that no memory of them remain in walls or windows, exhorting their parishioners to doe the like in their severall houses."

Queen Elizabeth did her best to stay the destruction, and issued a special proclamation forbidding the breaking or defacing of monuments of antiquity. The edict ran :

"No images set up for the only remembrance of individuals for posterity, and not for any religious honour, nor any image in glass windows shall be broken or defaced, upon pain of the wrong-doer being committed to the next gaol."

The tendency to iconoclasm, however, could not be extirpated, and was fully vehement under the Commonwealth. Under Cromwell, the only secure part of St. Paul's Cathedral was the east end, which was set apart for a congregation of burgesses. The noble portico, which Inigo Jones had built in front of the old Norman nave, was let out to sempstresses and hucksters, who had their stalls and shops there and in the chambers and staircases above. The nave served as a cavalry barrack and stable. The actual destruction in Commonwealth times may be judged from the Journal of William Dowsing, who was appointed by the Parliament in 1644 to enforce its orders in Suffolk.

"At Sudbury we brake down ten mighty great angels in glass ; in all eighty. At All Hallows, we brake about twenty superstitious pictures and took up thirty brazen superstitious inscriptions. At Clare we brake down one thousand pictures superstitious. I brake down two hundred ; three of God the Father, and three of the Holy Ghost, like a dove with wings ; and the twelve apostles were

carved in wood on the top of the roof which we gave orders to take down ; and twenty cherubim to be taken down."

Such widespread destruction can only be understood by recalling that in the sixteenth and seventeenth centuries, religious creeds in Western Europe served as political rallying cries. By this time the State and the Sovereign were regarded as identical, and dynastic interests tended to be exalted at the expense of the rest. France, England, Spain, Austria, Prussia, Sweden and Russia were all facing the problem, "How am I to persist?" and "How am I to grow?" Seeking territorial unity and settled sources of wealth, the nations were willing to entrust the supreme power to an all-powerful monarch and his ministers, but the change necessarily involved social and political strife. It would have been strange if rallying cries associated with the revolt from Rome and the break-up of Christendom had been neglected. In Germany, the princes utilised Lutheranism in their struggle with the Emperor Charles V.

When religion became the sport of political factions, the religious arts suffered. Apart from a diminished art fund, the enthusiasm of believers turned from the expression of religious emotion to controversial theology and other side-issues of belief. The Reformation mood had such an effect, direct and indirect, upon religious architecture that between 1520, the date of Bath Abbey, and 1670, when Wren commenced to rebuild St. Paul's, say 150 years, no great church or cathedral was built in England.

In France, it was much the same. A full century went by before Paris felt the influences of the Renaissance which Italy had experienced in the latter half of the fifteenth century. Then France called upon her architects to give expression, not to the vision and faith of the people, but to the power of her royal house. Something was due to the example of Italy ; but in such matters the source of inspiration is less important than the circumstances under which the alien art form became acceptable to another nation. Italian artists came to France in the reigns of Louis XI., Charles VIII. and Louis XII., but it was not until the Italian campaigns of Francis I. that Renaissance ideas made real progress in France. Unfinished Gothic churches were completed in the old manner, the greatest innovation being to put a Renaissance doorway in a Gothic setting. The clergy had all the churches they could afford, and architects were free to devote their time and talent to building houses for the king and nobles. In 1532, the Gothic church of St. Eustache was built in Paris by Pierre Lemercier and included Italian ornament, but the plan was based upon Notre Dame and took the form of a five-aisled building, with a circular apsidal end. The buttresses, however, were enriched by pilasters, which were also introduced between the windows. Another Parisian church of the period, St. Etienne du Mont, was built and decorated between 1517 and 1580. Here the triforium is supported upon round pillars and arches. The charming choir screen carrying the rood by Biard, with its richly carved balustrade and the charming double stairway winding about the two columns on either side, is one of the most picturesque features in Renaissance architecture.

Both St. Eustache and St. Etienne du Mont are transitional work, and in no way suggest that the Italian style was being absorbed into a new and distinctively French form of architecture. French Renaissance did not come into being until Henry IV. established political and social stability, and thus ensured the surplus of leisure and material wealth requisite for a real rebirth of art. A contemporary record tells : " So soon as he was master of Paris, one saw naught but masons at work."

The compromise with Catholicism enabled Henry to make France the first power in Europe. Compare her highly centralised government with that of Germany, where two or three hundred petty states claimed the right to make treaties and decide the religion its citizens should profess. At the end of the sixteenth century France was fifty years ahead of any European power in the creation of that unified public opinion which is the mainstay of a national state. Under Louis XIV., France temporarily solved the problem of territorial self-contentedness and proved her capacity to bring the resources of the nation to bear when its interests were threatened, though there were still Frenchmen who did not trust the policy of despotic centralisation. For example, Fenelon :

" Will God have mercy upon us in these days of wrath and retribution, because the sovereign gilds a chapel, tells a row of beads, listens to a musical Mass, is easily scandalised, exiles a Jansenist or two ? No, no ! What we want is peace, the remembrance of the true form and ancient constitution of this Kingdom. Despotism is the cause of all our evils. It is high time for this despotism to be tempered, for the nation to enter upon its rights and endeavour to save itself."

Fenelon's was a lonely protest. France, as a whole, approved of the policy of extreme centralisation under a Catholic king, and it was under this regime that the architectural revival developed. It might be expected that the re-establishment of Catholicism would have brought about a revival of the Gothic style. Beauvais might have been completed. Instead, the style adopted was that which the Italian architects from Bramante to Palladio and Bernini had developed to emphasise the wealth and magnificence of the Italian princes and the power of the Roman Church.

The revival of religious architecture began when Cardinal Richelieu instructed Jacques Lemercier (1585-1654) to build the Church of the Sorbonne in 1629. It proved to be a classical composition of rare beauty. The entrance facade consists of two orders, the lower being Corinthian columns and the upper Corinthian pilasters, surmounted by a plain pediment. Behind rises a double dome covering the centre of the little church. Inside, the altar is set in an apse, the arches of the bays springing from pilastered piles. A typical Renaissance effort this, though the first of its kind in France. The other leader of the architectural revival was François Mansard (1598-1666). A generation after Richelieu, Mansard designed another domed church, for the Val de Grace. It was a consequence of one among many vows made by Anne of Austria during her twenty-two years of childless marriage.

One day, in the sanctuary of the nunnery of the Val de Grace Anne promised a great church to the glory of God if a Dauphin was vouchsafed to her. In 1645 she led her child, then a boy of seven, to lay the foundation stone of the church which Mansard had designed on lines suggested by St. Peter's at Rome.

The Renaissance style, with its Græco-Roman columns and pilasters and its Italian domes, established itself wherever the taste of the French court held sway. Even in the Gothic cathedrals of France there were changes which showed the acceptance of Italian ideas. Louis XIV. did away with the Gothic high altar and the fifteenth century stalls in Notre Dame. In 1741, much of the mediæval glass was destroyed and replaced by grisaille, ornamented with yellow fleur-de-lis. The very instruction of artists and their organisation for big art efforts were a concern of the French court. By Letters Patent, dated December, 1608, Henry IV. decreed that craftsmen of all sorts should be housed in the Louvre and given facilities for work. "We have also, in the construction of Our Gallery of the Louvre, had the thought of ordering the building in such a form as to enable us conveniently to lodge therein a number of the best masters that are to be found : painters, sculptors, goldsmiths, clockmakers, engravers of gems, both in order to avail ourselves of their services and also to form a training school for workers, from which, under the guidance of such good masters, should come artisans who would disperse throughout Our Kingdom and be able to serve the public to very good purpose."

The goldsmiths, sculptors, tapestry designers and other artists at the Louvre were allowed to have apprentices. The new system proved much more elastic than that of the old craft guilds, and opened the way for any novelty which the skill of the individual craftsman could justify. Such a man as Colbert made a definite effort to organise the arts as an aid to national prosperity. It would be easy to illustrate the point from secular buildings in seventeenth century France, but the church dedicated to St. Louis in the Hôtel des Invalides will suffice to show how France utilised the lessons of the Italian Renaissance and applied them in a thoroughly original manner. Like the church of the Val de Grace, the Hôtel des Invalides suggests how the royal control of the art fund operated in seventeenth and eighteenth century France. For many years there had been a refuge for old and disabled soldiers, housed in a deserted abbey in the Faubourg St. Marcel. In 1670, Louis XIV. made a levy of the sixth part of a sou upon every livre paid into his war treasury and utilised the fund to build the Hôtel des Invalides, which resembled Charles II.'s hospital at Chelsea and housed 7,000 men. The chapel of the foundation was dedicated to Saint Louis and, later, Le Grand Monarque commissioned Jules Mansard to add a choir to the existing church, above which the architect raised a dome of great beauty and originality. Mansard's dome was 175 feet high and 82 feet in diameter and was raised on two lofty drums. The plan was a Greek cross design in which each arm of the cross was domed, though only the large dome in the centre was visible from the outside of the church. This dome was triple in form, the lowest being cut away to form

a huge eye. Through this a second dome was visible, its paintings being lighted by windows in an upper drum. In the church of the Hôtel and especially in Jules Mansard's dome, the significance of the Renaissance style can be recognised. An orderly array of columns, a spacious nave and an imposing tower or dome, made up the new House of God. Varying combinations of pilasters, walls and domes served the eighteenth century builder better than the pointed arches and hard-working buttresses of the earlier age would have done, just because the idea of God in the eighteenth century differed from the conception of the God-head in the Age of Faith. It was not required that mystic experience should find expression in the French church. Instead, an architect sought to create the satisfaction arising from the effort to solve a given problem gracefully and ingeniously. As before, the architect worked with masses of stone and the lines suggested by these masses. He obtained effects of light and shade by setting his stones at different planes or varying angles. Instead of an effort to express the life and character of a community, the spectator was invited to approve the proportions of a design under the guidance of an individual designer. This assertion of personal individuality is, perhaps, the most marked characteristic of modern as opposed to classical or mediæval art. It can be traced in all post-Renaissance art, in England as in France.

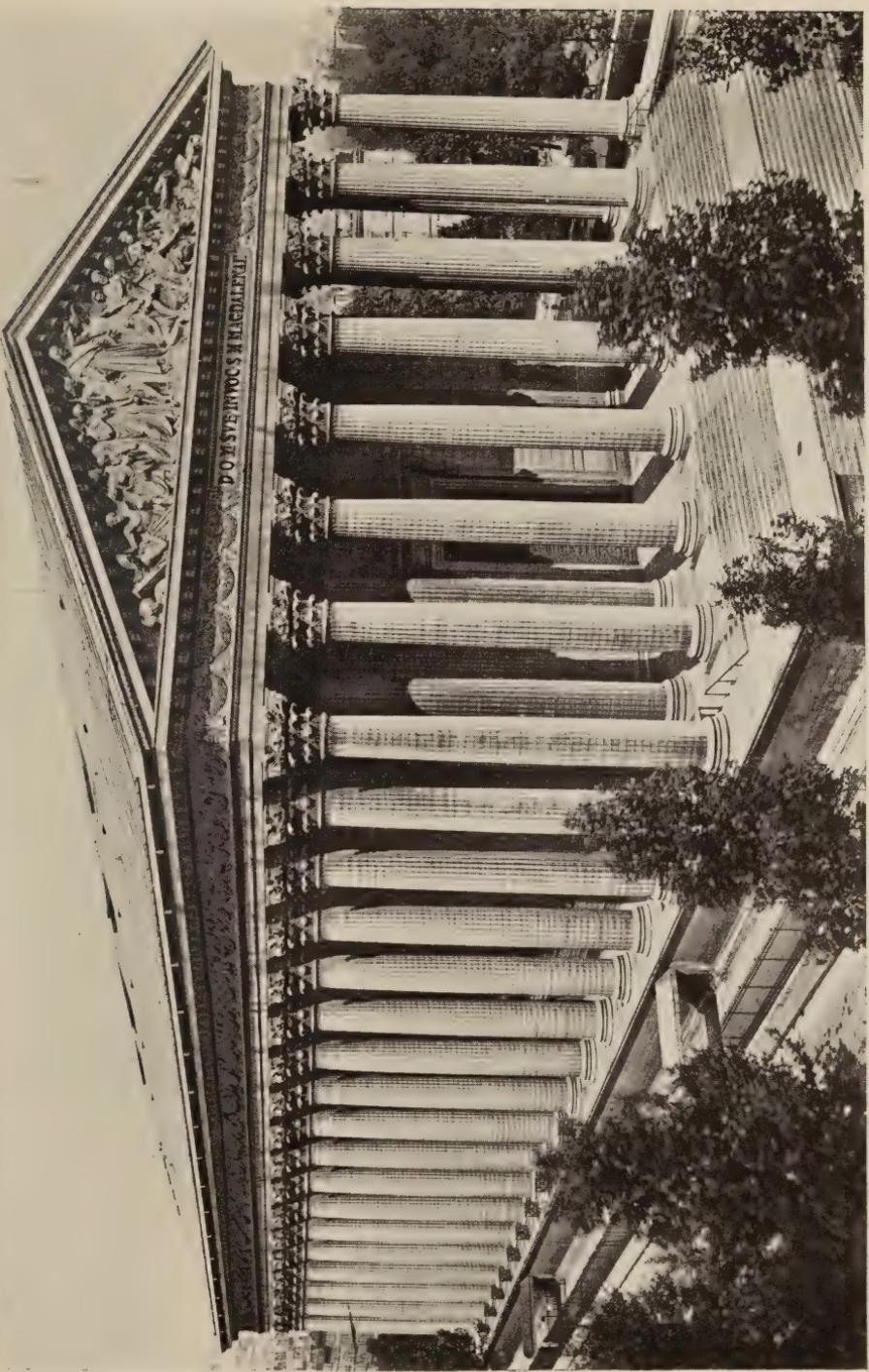
THE ENGLISH REFORMATION

Unlike France, England settled her feudal disputes early. When the Wars of the Roses finished, the Tudors had only the Church between themselves and absolutism. The policy of Cardinal Wolsey and Cromwell was to consolidate Tudor power at the expense of the Church. The spoliation of monastic houses in England was already accepted state policy. The alien priories were granted to Henry V. in 1415, and their wealth was used for the French wars. In the time of Henry VI. King's College chapel at Cambridge was built with funds taken from the alien priories. Wolsey and Cromwell were therefore on sure ground in utilising the revenues of decaying monastic houses for public purposes. When Henry VIII. was officially recognised as "Head of the Church and Clergy of England," Roman Catholicism had to acknowledge itself worsted in the political struggle.

As the relation between politics and religion in England and France was similar, so the growth of the Renaissance style in English architecture follows that of France. In both countries the earliest Renaissance buildings were Gothic, distinguished from earlier work by classical ornament. Italian influences first established themselves in England in the time of Henry VIII. Early in the sixteenth century it was customary for young Englishmen of good education to travel abroad, so details of the new architecture were soon known in England. About 1510, Torrigiano, the Florentine sculptor, reached London and built the tomb of Henry VII. at Westminster Abbey. In the middle of the sixteenth century, partly owing to the emptiness of the royal exchequer

(see page 288)

LA MADELEINE, PARIS





THE CATHEDRAL OF ST. JOHN THE DIVINE, NEW YORK

(see page 288)

in the days of Edward VI. and Elizabeth, the Catholic artists who had come to England from Italy went home, and Protestant craftsmen from Flanders and Germany replaced them. Sir R. Blomfield, in his *History of Renaissance Architecture*, tells of Casper Vosberg and other Germans who came to Burghley and petitioned Lord Burghley in 1572 "for privileges for a German church to be founded at Stamford." Even in the next generation, when Archbishop Laud built St. John's, New Briggate, Leeds (consecrated 1634), the exterior was Gothic and the interior arches were pointed. The decoration of the pews with their carved panels, the plaster panels in the roof and the wood screen, however, show traces of classical ornament.

With Laud, the statesman and reformer, art history is not directly concerned, but it cannot ignore the man who built the most significant church erected in the century between Bath Abbey and Wren's Cathedral of St. Paul's, and also influenced such a churchman as Matthew Wren, Bishop of Ely and uncle of Christopher Wren. Laud bitterly opposed the Puritan mood. Instead, he sought to establish Anglicanism as a mediating communion between Puritanism and Roman Catholicism. As Laud saw the religious problem in his age, Anglicanism was a combination of respect for tradition and a response to the demands of a new age. Its worship was based upon a desire to maintain long established and well-tested liturgical standards, and yet allow the whole body of the faithful to take part in church service, in a manner which had not been possible when prayers were said in Latin and the elaborate ritual of the Mass was the prime element in Christian worship. Instead of being an attribute of the ordained priesthood alone, under the Anglican conception priesthood belonged to the whole body of the Church, clergy, and laity combined. While at Gloucester, Laud caused the Holy Table to be moved from the centre of the choir to the east end of the church, a change which quickly established itself and had a marked effect upon future church planning. The mood of the Anglican Church in the seventeenth century was Erastian, and resented any encroachment upon the authority of the civil powers. With this mood went a desire to secularise religion and deprive it of its esoteric character. Corinthian columns, Cupids bearing wreaths and the like, were ornaments which had none of the associations of Gothic building and were therefore welcome to the Anglican builder.

The first architect who gave England a real opportunity of appreciating the Italian style was Inigo Jones, when he returned from his second Italian visit in 1612. Inigo Jones had lived in Vicenza long enough to master the architectural style which Andrea Palladio had developed from Michelangelo. Apart from the example of Inigo Jones, English builders were influenced by Palladio's book *I quattro libri dell' architettura* (1570), which superseded such volumes as Vitruvius's *De Architectura* or Alberti's *De Re Aedificatoria*. So intense was the devotion of Inigo Jones to Palladian principles that he is said to have destroyed many manuscripts in the possession of the Society of Free-masons detailing the methods of Gothic vaulting. In this vandalism he is said to have been assisted by Nicholas Stone, the sculptor who

was responsible for many tombs in the early part of the seventeenth century. Cupids, figures of the Virtues and classical pillars and pilasters, appear frequently in Stone's tombs. But of real classical feeling there is no trace, though here and there are hints recalling Michelangelo, as in the seated figures on the tomb of Sir George Holles (A.D. 1626) in Westminster Abbey.

Compared with Gothic, the Palladian style of Inigo Jones lacked flexibility. It has been said that Renaissance architecture can never be homely, a quality which gave the Gothic style not a little of its character. Inigo Jones, however, was followed by Christopher Wren. With less logic and more sensibility, Wren endowed the Italian style with the measure of flexibility necessary if Italo-Roman architecture was to serve for an Anglican House of God.

When Wren was a youth Evelyn described him as "that rare and early prodigy of universal science, Dr. Christopher Wren." Mere ornament interested Wren very little. What he made the bases of design were the geometrical parts of his art, depending upon optics and statics, which could not be subject to changes of taste. Just because architecture aimed at eternity it was a thing incapable of modes and fashions in its principles. According to Wren, beauty, firmness and convenience were the principles underlying the building art, beauty being defined as a harmony begetting pleasure to the eye. The basic principles inculcated by his classical training enabled Wren to transmute the Palladian style until it served the needs of the Anglican Church. In the end Wren proved himself an artist in whom the deepest powers of absorption were allied with the brightest faculties of production. Always, Wren sought to follow the principles of the best Greek and Roman art. He built in "a good Roman manner," and got away from what he regarded as the "Gothic rudeness of the old design." But it must not be believed that Wren worked to a fixed canon. Rather Wren made contact with the element which gave Greek and Roman architecture alike their abiding value. Wren was willing, nay anxious, to change his plans again and again while any building was in progress.

To artistic sensibility and cultivated taste were added an easy movement in the mechanics, physics and chemistry of his day, knowledge which gave him confidence to essay great tasks. Wren was a scientist of genius, who reached his powers of architectural design by way of mechanics. He was fortunate in finding an art which made large demands upon the engineer and the mechanic, architecture being more nearly allied to the sciences than any of the arts. Of all styles, the Palladian is the most scientific. From the beginning Wren saw that the practical part of building was, in the first place, a matter of structure and mechanics. "The design, where there are arches, must be regulated by the art of statics and the duly poising of all parts to equiponderate. Hence I conclude that all designs must in the first place be brought to this test or rejected." Wren chose the form of vaulting used in St. Paul's because "it was the lightest manner and requires less abutment."

Such was the man who revolutionised church building in England. When Wren built St. Paul's no English cathedral had been built for

150 years. During Elizabeth's reign there was less church-building than at any time in English history for 800 years. Under James I. and Charles I. a certain number of parish churches were rebuilt or re-decorated, in addition to those of Archbishop Laud, whose death was, in part, due to the charge that he "out-did Popery itself in the consecration of chapels." But, in general, the suppression of chantries, together with the doctrine which chantries symbolised, deprived churches of considerable benefactions and endowments. Moreover, already there were too many churches for the country's needs. Every large town had a friar's or abbey church, which could be had for the asking. The bishoprics established by Henry VIII. were provided with worthy stools by taking over the Benedictine churches at Gloucester, Chester and Peterborough, and the Augustinian churches at Bristol, and Oxford. At Canterbury, Winchester, Ely, Rochester, Durham, Norwich, Worcester and Carlisle, deans and chapters were given to the monastic cathedrals. English builders spent their energy upon secular works and the erection of a few college chapels.

Wren was born in 1632 and died in 1723, aged ninety-one. He had lived under Charles I., the Commonwealth, Charles II., James II., William and Mary, Anne and George I. Born in a country vicarage, he was the son of a Dean of Windsor and nephew of Bishop Wren of Ely, who underwent many years' imprisonment in the Tower rather than acknowledge Cromwell's right to interfere in Anglican affairs. Commencing with an education at Westminster School, under Dr. Busby, Wren had a brilliant career at Oxford, and became a fellow of All Souls. After a few years as Professor of Astronomy at Gresham College, London, and at Oxford University, Wren was appointed assistant Surveyor General to Charles II. in 1662. To fit himself for his new work, Wren went to Paris. Prying into the trades and arts for six months, he came back to London bearing "almost all France in paper." Never were six months of study put to better use. In Paris, Wren met Bernini and other Italian architects and sculptors who were working on the Louvre for Louis XIV. Wren described the unfinished palace as "the best school of building in the world." Certainly his trained intelligence learnt much. Wren went to Paris an astronomer and returned an architect, as the phrase goes. In a letter written from France, Wren said :

"I have busied myself in surveying the most esteem'd Fabricks of Paris and the Country round ; the Louvre for a while was my daily object, where no less than a thousand Hands are constantly employ'd in the Works ; some in laying mighty Foundations, some in raising the Stories, Columns, Entablements, etc., with vast Stones, by great and useful Engines ; others in Carving, Inlaying of marbles, Plaistering, Painting, Gilding, etc., Which altogether make a School of Architecture the best, probably, at this day in Europe. An Academy of Painters, Sculptors, Architects, and the chief Artificers of the Louvre, meets every first and last Saturday of the Month."

Wren's ideas upon the basic principles of architecture can be gauged

from a note written upon Louis XIV.'s palace at Versailles. He writes :

" The Palace, or if you please, the Cabinet of Versailles, call'd me twice to view it ; the Mixtures of Brick, Stone, blue-tile and gold make it look like a rich Livery : Not an Inch within but is crowned with little Curiosities of ornaments : the Women, as they make here the Language and Fashions and meddle with Politicks and Philosophy, so they sway also in Architecture ; Works of Filigrand and little Knacks are in great Vogue ; but Building ought certainly to have the Attribute of eternal ; and therefore the only thing incapable of new Fashions."

If Wren was happy in his classical training, he was equally fortunate in securing a royal patron who might well have become a builder of great palaces, but was forced by circumstance to become a builder of great churches. Like Louis XIV., Charles II. had the ambition to celebrate the re-establishment of the Stuart line by enriching England with noble buildings. The direction this ambition took was fixed by the Great Fire of London in 1666. Charles became the patron of Christopher Wren in his determination to build a worthy London upon the ashes of the Fire. Within twelve days of the end of the Fire, Wren had submitted a complete scheme for the reconstruction of the City, the plan being a masterpiece of town planning, including thoroughfares 90 feet wide, and great streets 60 and 30 feet wide, in addition to an embankment running from the Tower to Temple Stairs. This vast scheme was never carried through, but, between 1672 and 1711, Wren rebuilt 51 of the 91 churches destroyed. Of the 57 churches rebuilt after the Great Fire, 23 have since been pulled down, but about 30 of Wren's churches remain.

Wren did not cease from his life's work of rebuilding London until 1718, when he was removed from the post of Surveyor General, which he had enjoyed for forty-nine years. He passed the last years of his life in contemplation and study, cheerful in solitude and as well pleased to die in the shade as in the light, as his son said. It was Wren's custom to visit St. Paul's once a year. He was wont to sit for an hour under the dome which his imagination and energy had raised from the ashes of a ruined city. During one of these visits Wren caught a chill ; returning to the Old Court House on Hampton Court Green, the old man dined in the bow-windowed room on the ground floor. An hour or two later, his servant, wondering at the length of the meal, went in and found his master dead in his chair. Wren had passed away in sleep. He was buried in the crypt of St. Paul's, the Latin epitaph, composed by his son, reading :

" Subtus conditur hujus ecclesiae et urbis conditor Christophorus Wren qui vixit annos ultra nonaginta, non sibi, sed bono publico. Lector, si monumentum requiris, circumspice."

It is often forgotten that Wren was not only the maker of St. Paul's, but of a new London—"Of this City," as his epitaph records. When

New London began to arise from the hot ashes of the Gothic town, some of Wren's earliest work was to build temporary tabernacles for worship among the ruins. The register of St. Peter's, Cornhill, under date December 31, 1672, records "that the Churchwardens do present Dr. Wren with five guineas as a gratuiteme for his paines in furtherance of a Tabernacle for this parish." When the stone or brick churches were built later Wren usually had to make the best of the old site, which was often cramped and irregular. The designs for many of Wren's City churches were determined by practical necessities. Thus, the incongruous wooden galleries hung from the side walls of several churches were necessary because the congregations of ninety churches had to be accommodated in the fifty-seven churches rebuilt after the Great Fire. The urgent need for speedy completion and economy also had its effect upon Wren's designs. He seldom or never had all the money, labour and time which the full adornment of his architectural designs required. Just because there was not the same pressing need for a tower or steeple, these features of a Wren church usually display the architect's ingenuity in design most surely. Having to reconstruct a flat city, Wren chose to crown his fifty churches with towers, spires and lanterns of the utmost variety. The tiny spire of St. Dunstan's in the east, the imposing arched spire of Bow Church in Cheapside, which adds such dignity to a prosaic marketing centre in the City, and the soaring spire of St. Bride's, Fleet Street, were not only beautiful things in themselves, but most happily suited to their special surroundings and purpose. In St. Bride's, where the church was finished in 1680 and the spire added in 1700, the stages of the spire seem to diminish regularly; in reality, the spire has a slightly convex outline, recalling the Greek *entasis*. The fuller outline is more pleasing to the eye than the weaker straight line would have been. It happily survived the "blitz" of the World War, though the nave and choir were destroyed.

The exteriors of Wren's parish churches were usually built of red brick, the windows being of Portland stone. Most of the designs were rectangular, but, in several cases, Wren experimented with a Greek Cross design, which allowed a square site to be used and a dome to surmount the central position.

During the 150 years since the Gothic churches were built, great changes in ritual had arisen. In a post-Reformation church there was no need for separating the clergy and the congregation. At the most, the Communion table was separated from the body of the church by a wooden rail. There was not even need for a place for the choir in the chancel, so Wren devised organ galleries for the choristers. The existing custom, by which the choir occupy two sides of the chancel, is of modern origin and is due to Tractarian influences in the nineteenth century, which sought to make worship in a parish church approximate more closely to the old-time cathedral use. Wren's purpose was to devise a meeting place which would be well fitted for a preaching church. For ornament he relied upon the woodwork, which he could add in the form of altar rails, pulpits, staircases, organ lofts and reredoses. For the rest Wren relied upon such a wood-carver as Grinling Gibbons

and other craftsmen, whom he trained to his special requirements. The screen, formerly in All Hallows the Great, and now in St. Margaret's, Lothbury, and the screen in St. Peter's, Cornhill, are noteworthy examples of the beauty appropriate woodwork added to Wren's simple preaching churches.

Perhaps the most charming of Wren's interiors was that of St. Stephen's Walbrook, close to the Mansion House, and one of the earliest of Wren's City churches. It was built in 1672, and may be regarded as an experiment in the manner which was to result in St. Paul's Cathedral. St. Stephen's, Walbrook, was a small church, only 82 feet by 60, but gave a remarkable impression of size and airy space. The shallow dome rested on pillars without any drum, the impression of space being largely due to the apparent lightness of the supports which carried this central dome. The lighting of St. Stephen's, Walbrook, was also original in a high degree. It was wrecked by bombing.

Wren's earliest design for St. Paul's was a Greek cross, but the clergy were not ready for such a departure from precedent, and a Latin cross design was substituted. The first stone was laid on June 21, 1675, and the top stone of the lantern was placed thirty-five years later by Wren's son and Edward Strong, son of Thomas Strong, who had helped Wren himself to lay the foundation stone. The cost of the cathedral, as shown in the manuscript book in the Lambeth Palace Library, was £736,752 2s. 3½d., though it should be remembered that money was worth four or five times as much as it is to-day. Much of the money was raised by a coal tax. For his work as "Surveyor General and Principal Architect for repairing the whole City, the Cathedral Church of St. Paul's, all the parochial churches with other publick structures," Wren received a few hundred pounds, his salary as architect of St. Paul's being £200 a year. For material, Wren chose Portland stone, knowing that its silver-grey tones would contrast happily with the brick walls and russet tilings of the London houses. Dominating the whole building was the dome, carried upon a peristylar drum and proclaiming the cathedral the very centre of the newly-built city. Objection has been raised to the portico of St. Paul's being built in two stages, instead of the bigger and more imposing single order. The small-sized columns were due to the difficulty of getting Portland stone which would cut into blocks of more than 4 feet diameter. Wren, accordingly, made this size his standard. As for the ingenuity of the design, a charming passage by Professor Lethaby may be recalled, written during the celebration of the bicentenary of Wren's death in 1923. He says :

"Even that dry diagram, the plan of the church, is so amazingly compacted together that it quite awes me. The size and generosity of it, the wonderful disposition of parts about the dome supporting it adequately and yet not blocking the vistas : the contrivance of the western work which lengthens and terminates the nave by a great bay, leaving the normal part of it the same length as the chancel : the arrangement of western towers, side-chapels and portico ; the transepts with their attached circular porches echoing the round

east end ; the internal alcoves in which the aisle windows are recessed—each part fulfils its function easily and intelligibly without disguise, while together all seems an inevitable unity. In the interior the way in which lower arches ranging with those of the aisles alternate with the four great arches around the dome and provide for balconies above : the wide circular opening in the inner dome allowing sight of the farther dome under the lantern, with its wreath of distant windows : the shallow transepts, which are hardly more than extensions of the central area ; the form and adjustment of the vaults—all are masterly. The western ‘spires’ are wonderfully elegant and original structures : solid as they look from near by, they are made up of open work so that from a distant view-point the sight pierces through their many arches in a most delightful way. The western portico, with the great pillared balcony above it (often miscalled a two-storied portico), each having a wide-thrown arched vault : and, crowning all, the vast dome with the circular colonnade below and the piercing lantern at the summit is simply right—majestic with a kind of humility, untroubled and smiling. Even the minor ornamental forms borrowed from Roman art are played with and penetrated by an inventive spirit.”

In judging the beauties of a Renaissance church, standards suggested by a Gothic abbey or cathedral should be put aside. Wren made no effort to give mystery to his religious buildings. He sought to leave the impression of space and light. There were no dimly lighted aisles and the lines and masses were not designed to converge upon a majestic altar. In Wren’s design for St. Paul’s, the high altar was placed in the apse. During the nineteenth century a reredos was built against the last piers of the choir, and the apse was thus formed into a Jesus Chapel. For the east end, Wren devised a marble baldachino, similar to that in St. Peter’s, Rome. The design may be seen in the collection of drawings at All Souls, Oxford. The plain white walls and clear glass of a Renaissance church present difficulties to those who find the final beauties of religious architecture in a Chartres or a Gloucester. It may be remembered, however, that these have their value as a background against which vestments, brasswork and carved wood stand out with fine effect. Moreover, after years of civil strife, it was natural that worshippers should have a special regard for moderation and order in public worship as in civil affairs, even if moderation and order brought with them a certain absence of emotion when compared with earlier religious art. In the later seventeenth and eighteenth centuries an excess of zeal and spiritual rapture and ecstasy were regarded as of little worth. In a sermon, Dr. South anathematised enthusiasm as “that pestilent and vile thing which has thrown both Church and State into confusion.” Certainly, in Wren’s nature there was no Puritanical disregard for beauty. The places of sacrament—the font and the Holy Table—in a Wren church were hallowed by every grace which the architect regarded as in keeping with a “grandeur which would exceed all little curiosity” or fitted for “a monument of the power and mighty zeal in public

works to Londoners of a later age," phrases which Wren himself had used of Old St. Paul's. A designer of genius, Wren was no less remarkable as an organiser. He collected and trained the body of masons, sculptors, and carpenters necessary for rebuilding London, and produced from their efforts an artistic unity. He was particularly happy in his choice of men. Recall the ironwork gates and grilles in the sanctuary, and the railings in the galleries which Tijou made from the charcoal-smelted iron of the Sussex Weald. Equally happy was Wren's use of Grinling Gibbon's lime-wood carvings on the Bishop's throne and choir stalls, and in the decoration of the organ loft. Gibbon, or Gibbons as he is now called, was the son of an Englishman living in Rotterdam. He came to London in the year after the Great Fire. The story goes that he took lodgings in Belle Sauvage Court on Ludgate Hill, and there carved a pot of flowers of such delicacy that "the leaves shook as the coaches passed." John Evelyn found Gibbons in a workshop at Deptford and introduced him to Charles II., who gave him a post in the Board of Works. Gibbons was paid £1,333 7s. 6d. for the foliage he carved in the choir of St. Paul's. He died in 1720, and was buried in the churchyard of St. Paul's, Covent Garden.

Apart from Wren's churches, an Act of Parliament was passed in 1712 for rebuilding and endowing fifty new churches outside the city limits, consequent upon the extension of the residential area. Ten of these were built, among them St. Mary le Strand, by Gibbs, a pupil of Wren, and four by Wren's assistant, Hawksmoor—St. George's in the east; St. Anne's, Limehouse; Christ Church, Spitalfields, with its fine interior and tower; and St. George's, Bloomsbury. Gibbs also built St. Martin's in the Fields and the steeple of St. Clement Danes, while Hawksmoor was responsible for St. Mary Woolnoth, Lombard Street, and the western towers of Westminster Abbey. A noteworthy addition to London ecclesiastical architecture was the beautiful lantern tower of St. Dunstan in the west, built by John Shaw in 1832.

CHAPTER XVIII

RELIGIOUS ARCHITECTURE IN THE NINETEENTH CENTURY

With Gibbs and Hawksmoor, the Renaissance movement in England ended, so far as religious architecture was concerned. Repetition brought about the exhaustion of invention. The noble example of Wren failed to take the place of the deep-rooted national impulse towards mystical expression which had given Christendom its glories of Gothic architecture. During the Age of Faith, architecture had been a natural expression of life ; in post-Renaissance times, it became a matter of individual taste. Thus, in the eighteenth century, there was a neo-classic taste, while the romantic temper of the early part of the nineteenth century brought a neo-Gothic taste into being, until the existing state of affairs to-day was reached, in which taste is so all-embracing that it seldom represents what should be the end of good taste, enjoyment. What England in the nineteenth century experienced were revivals of Græco-Roman and Gothic architecture, which added nothing material to what the past had accomplished. Consequently, accuracy of imitation became an end in itself. At its best, it gave us the cold imitation of Early English architecture which Pearson enshrined in Truro Cathedral.

The revival of Græco-Roman building methods at the end of the eighteenth century was the logical conclusion of 100 years or more of effort in classical construction. The Madeleine in Paris was built by Pierre Vignon (1763-1828) for Napoleon as a Temple de la Gloire, and was an express imitation of a Græco-Roman temple. The three bays were covered with flat domes, affording the light necessary for the building. Hittorff's church of St. Vincent de Paul, and the Panthéon, are other churches of classical design in Paris. The Panthéon was built in the form of a Greek cross, the design giving four halls surrounding a central domed hall, 69 feet in diameter. To-day, the Panthéon has been secularised, but is made-meet for God and man by the noble wall paintings of Puvis de Chavannes. By some, these paintings may be regarded as ill-fitted for a House of God, but surely only if a narrow definition is attached to the idea of the Godhead and God's relation to humanity.

In England, the neo-Greek revival was preluded by the visit which James Stuart and N. Revett paid to Greece in 1751. This resulted in the production of the *Antiquities of Athens* and other publications issued by the Dilettanti Society between 1762 and 1860. The neo-Greek revival gave London such a building as St. Pancras Church

(1819-1822), with its Erechtheion portico, its Caryatid porch and its tower made up of an imitation of the Temple of the Winds in Athens, surmounted by an octagonal imitation of the monument of Lysicrates. All Souls, Langham Place, was the work of Nash the designer of Regent Street, another classicist. Best known of all, perhaps, is the work of "Greek" Thomson, the builder of St. Vincent's Street Church, Glasgow.

Following the neo-Greek revival came the neo-Gothic revival. In part this was a mere alteration in professional and public taste. The interest in things Greek was exhausted ; the architect and his clients alike were ready to turn to a new phase of antiquarianism. In France, the Gothic revival owed much to the scholarship and enthusiasm of Viollet le Duc, who has said that his enthusiasm for Gothic art was stirred when, as a boy, he stood in Notre Dame and realised the beauty of the great rose window in the south transept. As he looked, the organ began to play, and his boyish fancy suggested that the colours in the window were singing—the shrill, soprano notes coming from the lighter tones of the window, and the solemn, bass notes from the darker and more sombre colours.

Viollet le Duc's *Dictionnaire Raisonné*, published between 1853 and 1869, and his learned restorations of Sainte Chapelle and other great French churches, provided plans, measurements, and historic facts on matters of craft, from which students still draw generously.

The Gothic revival in England, similarly, had its literary and historical side as well as its architectural aspect. The neo-Gothic equivalent of the books of Stuart and Revett was John Britton's *Architectural Beauties of Great Britain*, published in 1805, with steel engravings by John le Keux, and the publications of the Cambridge Camden Society. Horace Walpole and the novels of Sir Walter Scott helped to popularise Gothic buildings and to remove prejudices which had been so strong in the time of Wren. The Tractarian Movement also tended to encourage an interest in mediæval thought and art. Augustus Welby Pugin (1812-1852) led the Gothic revival. Pugin was the son of a writer who had made a long study of Gothic art, and, as a youth, Pugin made many small measured drawings for his father's books. But for the mischance that he died at the early age of forty, the architectural achievement of Pugin would have been even greater. He had immense powers of work, but his best designs were never carried out, and his influence was most effective as a writer upon ecclesiastical architecture, in particular Pugin's fiery controversies with the courtly Professor of Architecture at the Royal Academy, Cockerell, to whom was entrusted the case for classicism. The instructive and amusing struggle between the neo-Goths and the neo-Classicians has been described in an interesting essay by Kenneth Clarke, *The Gothic Revival*, who emphasises the fact that Pugin regarded Gothic not as a style, but as a religion. St. George's Cathedral, Southwark, St. Augustine's, Ramsgate, and Killarney Cathedral are among Pugin's architectural achievements.

Pugin was followed by Sir George Gilbert Scott, who rebuilt the spire of Chichester Cathedral ; by Street, who rebuilt the nave of Bristol

Cathedral ; and by Pearson, who built Truro Cathedral in imitation of Lincoln.

Sir George Gilbert Scott (1811-1878) was the son of a clergyman, and in early years was impressed with the beauty and significance of Gothic architecture and sculpture in church building. During a long and strenuous professional career, Sir Gilbert Scott worked on 732 buildings, among which were twenty-six cathedrals, ten minster-churches, and 476 parish churches. His early work was done at Lincoln, and the influence of the Early English and Decorated styles, particularly the Angel Choir at Lincoln, remained with him throughout life. Scott's "awakening" came in 1840, when he chanced to read an article by Pugin. St. Mary Abbot's, Kensington, St. George's, Doncaster, the Episcopal Cathedral at Edinburgh, and the chapels of Exeter College, and St. John's, Oxford, are among his best works. His son, George Gilbert Scott, built St. Agnes, Kennington, and other notable churches in the Gothic style. Other noteworthy English churches of recent years are St. Mary, Eccleston, near Chester, which Mr. G. F. Bodley built for the Duke of Westminster, Holy Trinity, Kensington Gore, also by Mr. Bodley, and the lovely little memorial church of the Holy Angels, Hoar Cross, Staffordshire, which Mr. Bodley designed in collaboration with Thomas Garner. Garner also designed the choir and presbytery of Downside Abbey, a charming and learned essay in the Early English style. The nave has since been added by Sir Giles Gilbert Scott, as a memorial to the Old Boys of Downside who fell in the World War. J. D. Sedding designed and decorated Holy Trinity, Sloane Street, with the aid of a body of artists which included Alfred Gilbert and Burne-Jones. It is an outstanding example of what can be done by an alliance between the architect and decorative craftsmen, and suggests developments which Sedding only foreshadowed. In Clerkenwell, Sedding built the Church of the Holy Redeemer for a priest who had commenced his ministry in a corner shop, converted into a mission-hall. It is a design of real interest in the Renaissance manner, the predominant influence being Wren. William Butterfield was responsible for St. Alban's, Holborn, a church owing its origin to a missionary effort which began in a room above a fish-shop in Baldwin's Gardens. Memorable is the triptych, picturing scenes from the life and martyrdom of St. Alban.

Passing to recent times, St. Catherine Coleman, Hammersmith, designed by Mr. Robert Atkinson in a quasi-Byzantine style, is faced with brick, though the building is actually constructed from steel embedded in concrete. It is an excellent example of a suburban church, such as the extension of London is demanding in ever-increasing numbers, and has been built out of the proceeds of the sale of a City church of the same name. For the Christian Scientists, Sir John Burnet has built the Second Church of Christ, Scientist, in Palace Garden Terrace. A novel feature in Sir John's design is the treatment of the organ, which replaces the reredos in an Anglican church. Encased in dark woodwork, the organ rises to the roof, with happy decorative effect. In such churches architects are properly more concerned with providing

adequate seating accommodation than with the ritual which largely determined architectural features in a mediæval church. Mr. Unsworth's Church of the Good Shepherd, Sion Mills, Tyrone, Sir Herbert Baker's St. Andrew's, Lilford, Mr. Temple Moore's St. Columba, Scarborough, Professor Beresford Pite's Christ Church, North Brixton, and Sir T. G. Jackson's Giggleswick School Chapel may also be mentioned. The subject is fully illustrated in *Recent English Ecclesiastical Architecture*, by Sir Charles Nicholson and Mr. Charles Spooner.

The battle of the styles in the Victorian age ended in the customary British compromise. Secular buildings were to be built on Græco-Roman or Renaissance lines, while cathedrals and churches were to be Gothic. But certain problems remained which could be solved neither by a return to the methods of Hugh of Lincoln nor those of Ictinus. A modern church, and especially a communal cathedral, must provide for occasional mass gatherings. The necessity for a congregation of three or four thousand people seeing and hearing a preacher adds a complication to modern church planning. The builder of a mediæval minster was not troubled by this consideration, though it was faced by the designers of Sancta Sophia and the Duomo at Florence. When John Bentley designed the church which was to become the centre of Roman Catholicism in Britain, Westminster Cathedral, he turned to the domed architecture of Byzantium, the earliest style which combined the requirements of Christian ritual with a large congregational meeting place. The idea of a Roman Catholic cathedral at Westminster originated with Cardinal Wiseman, but little progress was made until 1884, when a site was obtained a few hundred yards from the Abbey. The first design considered was on Gothic lines, but, finally, Cardinal Vaughan persuaded Mr. John Bentley to consider the possibility of some development of the Byzantine style. Bentley spent six months touring in southern Europe and then produced a masterly design, the elements of which are a vast nave and sanctuary, covered by four saucer domes. In using the saucer domes Bentley chose to follow the Byzantines in sacrificing exterior to interior effect. The aisles of Westminster Cathedral are, relatively, of small importance, though the side chapels occupy considerable space in the plan. The nave is all-important. Here the arches are 90 feet high, the vault rising to 109 feet, four more than Westminster Abbey. The walls are of brick but the interior columns are of verde antico, from the Larissa quarries in Thessaly, upon which Justinian drew in the sixth century A.D. In the sanctuary, the columns are of jasper, red granite and pavonazzo, the carved capitals being of alabaster. The baldachino over the high altar has eight columns of onyx, each 15 feet high, carrying a canopy of marble. When Westminster Cathedral is finished, the brick walls of the interior will be shrouded in coloured marble and mosaic. Already some chapels hint at effects which will recall the rich decoration of Justinian's churches. The symbolic carving which will add emotion and meaning to the church can be judged from Eric Gill's limestone "Stations of the Cross," consecrated on Good Friday, 1918.

The United States and the Overseas Dominions of the British Crown have had to face special problems, largely due to the absence of public acquaintance with the treasure of religious art which Britain, France, Germany, Italy and Spain possess in generous measure. The difficulties of an architect, hampered by over-minute instructions, are accentuated in places where an enlightened public opinion is lacking, and where there is a tendency to test matters of art by analogies drawn from commerce. In Dominion architectural history a welcome event was the completion in 1929 of the Cathedral Church of Christ at Victoria, British Columbia, after the plans of Mr. J. C. M. Keith, an Anglo-Canadian architect. The cathedral was built of reinforced concrete, faced with grey stone. It stands upon a noble site, overlooking the Pacific. American architects, moreover, have suffered even more than their English colleagues from being required to put up elaborate buildings with insufficient funds. When Anglicanism established itself in America, religious architecture in the Mother Country was far from vigorous, and the typical American church included a Georgian facade in the neo-pagan style, with a steeple at one end, and a screened chancel as the dominant element in the interior. Architects of vision also had to contend with prejudices, derived from Puritan tradition, against columns or piers which would distinguish a church from a lecture hall. Puritan opinion favoured a white-washed room with box pews, from which decorative art was excluded as idolatrous. The first Gothic revival in America was led by Upjohn and Renwick, but failed to make a lasting impression, and was followed by the vogue of Romanesque established by Richardson. Only within the last thirty years have American architects followed the lead given by such men as Bodley, Sedding and Garner in England. Bodley himself was invited to design a cathedral in the fourteenth century English style for Washington, and when he died was followed by Vaughan, another Englishman. The cathedral at Washington is now in the hands of five architects, who are working upon the sketch plans of Bodley and Vaughan.

Since 1900, American architects of high enthusiasm and ability have set themselves to the task of supplying the various denominations of the United States with the churches they require, and the output has been remarkable. Mr. B. G. Goodhue has produced a noble design for a cathedral at Baltimore, and the Chapel at West Point, and St. Thomas's Church, New York, stands to the credit of Messrs. Cram, Goodhue and Ferguson, who are also associated with the cathedral of St. John the Divine, New York. With the marked advance in architectural vision has gone a remarkable development in decorative design, associated with such men as J. Kirchmeyer, the wood-carver, B. G. Goodhue, who designed the magnificent reredos which occupies the entire east end of St. Thomas's, New York, and Cope and Stewardson, who designed the beautiful choir screen for St. Luke's, Germantown, Pennsylvania. An interesting experiment in modern church planning is the Broadway Temple, New York, a brick, limestone and marble building in the sky-scraper manner by Messrs. Voorhees,

Gwelin and Walker, architects who are also responsible for the Salvation Army Headquarters in New York City. With these essays in up-to-date building methods and materials may be compared M. Perret's design for a concrete church in Paris, in honour of St. Joan of Arc.

America's greatest effort, however, has been reserved for the vast cathedral in the French Gothic style, which the Episcopal Church in New York is building to the glory of God and in memory of St. John the Divine. Fifty years passed between the inception of the scheme and the selection of a site on Morningside Heights in 1891. By 1925, the crypt, the choir, the apse and the crossing—a square of 100 feet—had been built at a cost of £1,300,000. At least another £3,000,000 will be required to complete the cathedral, which will then be the third largest church in the world, the central rotunda being even larger than the central space in St. Peter's, Rome. The appeal of the trustees for funds was addressed to Christians of every creed. One sentence ran :

"New York impresses the imagination by visible evidence of the power and splendour of material achievements in American life. Such a city should be dominated by a building which, in its greatness, dignity and beauty, bears witness to the spiritual forces without which material achievement is valueless because soulless."

The area of St. John's, New York, will be 109,000 square feet, compared with the 128,000 feet of Seville Cathedral, and the 227,000 feet of St. Peter's. In style, the New York plan is a modification of French Gothic, with the characteristic chevet, doorways, towers and soaring piers of the French style. Originally, the idea was to build a church which would be French Romanesque on the exterior and Byzantine within, but the clash of styles was too marked and Dr. Cram was called in to remodel the design, and he replaced the Byzantine semi-dome with a Gothic clerestory and vaulting. In the nave the main piers will rise unbroken from the floor to the vault, the triforium and clerestory being carried upon the piers of the first pair of aisles, there being two aisles on either side of the central nave.

The narrow outer aisles replace the row of chapels in many French Gothic churches. Though there will be nine bays in the nave, there will be only four bays in the nave vaulting, these four bays springing from major piers which alternate with five smaller piers. The seven Chapels of the Tongues about the sanctuary recall the many racial sources from which the American people are derived, and are dedicated to St. James, St. Francis of Assisi, St. Martin of Tours, St. Saviour, St. Columba, St. Boniface of Germany and St. Ansgarius of Denmark, the services in the chapel of St. Saviour being frequently in Chinese or Japanese. The shaft of the credence table beside the high altar is supported upon three stones from the ruined abbey of Bury St. Edmunds. The canopies above the choir stalls are copied from those in Henry VII.'s chapel at Westminster. At the entrance to the choir is a parapet carved with figures representing Christians who have contri-

buted to the spread of the Gospel during the twenty centuries since the Christian era. The chosen characters are :

St. Paul, Justin Martyr, Clement of Alexandria, Athanasius, Augustine of Hippo, St. Benedict, Gregory the Great, Charles Martel, Charles the Great, Alfred the Great, Godfrey of Bouillon, St. Bernard, St. Francis of Assisi, John Wyclif, Columbus, Cranmer, Shakespeare, George Washington and Abraham Lincoln.

An uncarved block remains for the saint of the twentieth century.

The English equivalent of St. John the Divine, New York, is Liverpool Cathedral. Commenced in 1903, it is being built by Sir Giles Gilbert Scott, a grandson of the leader in the Gothic revival. Liverpool is the first cathedral built in Northern England for 700 years, and the Consecration Service, celebrated in July 1924, was the first of its kind since the site of Roman Sarum was abandoned, and Bishop Poore built Salisbury Cathedral two miles away. The beautiful service at Liverpool was based upon St. Bernard's sermon "On the Consecration of a Church."

The diocese of Liverpool was established in 1880, and the site of the cathedral, St. James's Mount, a low hill about a mile from the Mersey, was secured in 1902. A year later, the building committee selected a design by Giles Scott, a youth who was not even out of his apprenticeship. Time has justified the choice. There were the doubters who thought the twentieth century could not build a truly great House of God. Sir Giles Scott and the people of Liverpool have shown the belief was wrong. Not only is the cathedral of rich beauty and significance, but the architect has provided a meeting place, where a vast congregation can see and hear, without sacrificing the spiritual appeal of a House of God in the Age of Faith. "My aim is to make those who go in want to pray," said the builder.

Liverpool Cathedral was designed by a youth of twenty-one, and is being built by a man who will only be in the sixties when the task is ended, provided the work proceeds as it has done for thirty years. When the competition was announced Giles Scott was working as an articled apprentice, his master, also an entrant, being unaware he was competing against his pupil. When he returned home each night, young Scott worked into the small hours of the morning. "As the thing took shape it became harder and harder to see the dream through the lines and colours of my plan. I was very near to failure, but, while my enthusiasm flagged, that of my friends grew." Towards the end, all the family, headed by the architect's mother, were marshalled to aid in finishing the detailed drawings. So success was achieved. By 1935, the choir, the four transepts flanking the central space, the Lady Chapel and the chapter house, were built and work had been commenced on the central tower. When the cathedral is completed it will be 619 feet long with the area of 101,000 square feet, making it the largest church in Britain, and the fourth largest in the world. Throughout, decorative detail has been subordinated to architectural mass. Where a Gothic or neo-Gothic builder would have used eight or nine bays to form a nave, Giles Scott has used three, each with a single two-light window.

The choir also consists of three bays, the exterior being divided by immense and many-stayed buttresses, pierced near the top by an arcaded gallery. Between each pair of buttresses there is a window, occupying practically all the spare wall space. The great sloping buttresses give a sense of mass to the choir, as the great piers and arches do to the interior of the nave and choir. For the same reason there is no clerestory, and the triforium is thrust between the lower stages of the vaulting, that nothing may detract from the strong, certain spring of the piers to the roof. The choir aisles appear to be tunnelled through the huge exterior buttresses, and, indeed, are little more than passage-ways. Very characteristic of the design are occasional glimpses through low arches of soaring lines which lead upward to the unseen vault. The broad, aisleless nave and choir, the vast central rotunda, with its four transepts—just because they are so big in scale yet so simple in treatment—have a quality of power which is rare in modern architecture, secular or religious. The builder's aim was to unite Romanesque mass and space with the Gothic sense of line, but, in practice, he has relied more upon mass and space than upon line. This is his contribution to the art of church designing, and distinguishes Liverpool Cathedral from the churches of the leaders of the Gothic revival in the nineteenth century with their hard, linear treatment. (See plan on page 293.)

Sir Giles has varied his plans again and again during the forty years in which Liverpool Cathedral has been in the making; in particular, a single Central Tower, 280 feet high, has been substituted for the twin towers of the original design. In general, the purpose of the changes has been in the direction of greater simplicity, and the provision of more central space for the housing of a great congregation. Sir Giles is building his church in a warm red sandstone, varying from a light buff to purple, the joints between the stories being emphasised by lines of grey concrete. The varying colours of the sandstone are utilised with happy effect in the reredos, where a lighter stone is used for the sculptured panels, contrasting with the lower toned sandstone around and the glow of the "Te Deum" window above.

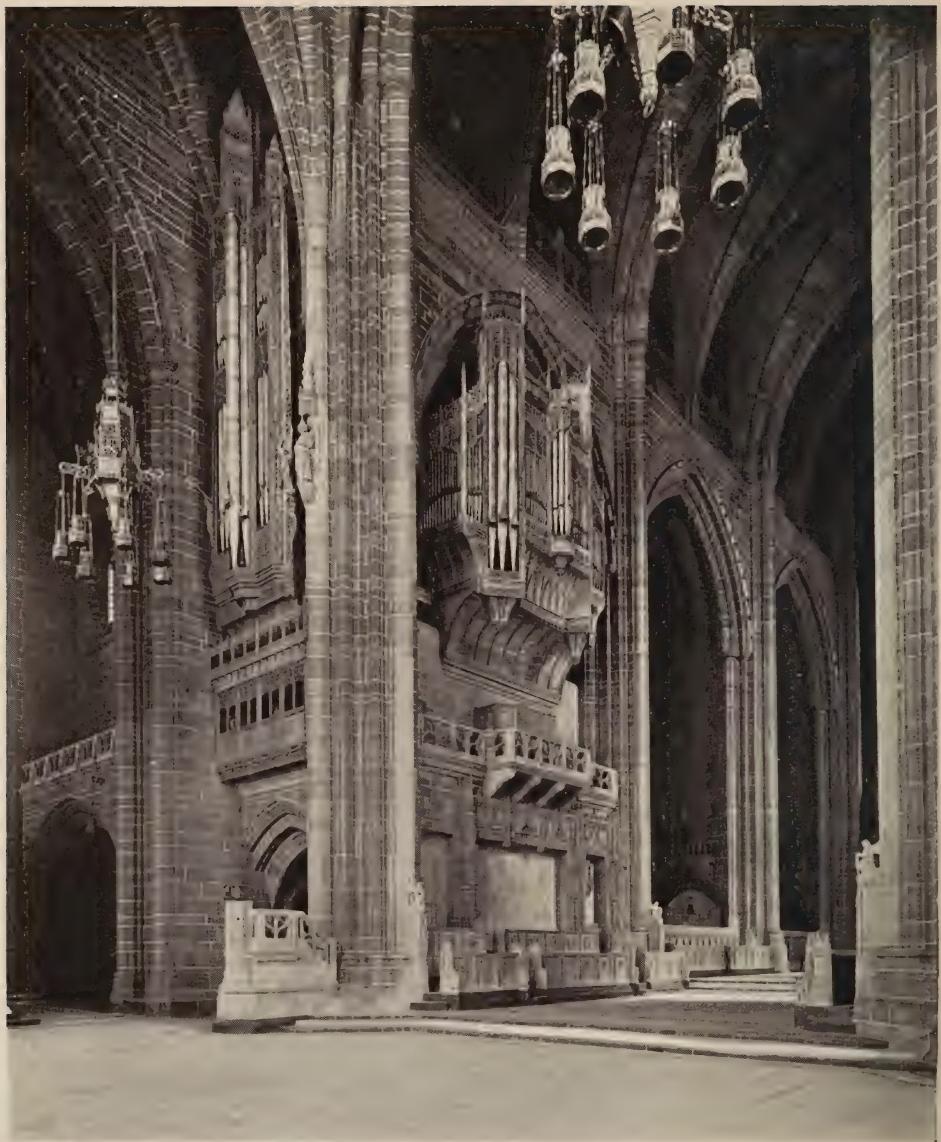
The reredos is not a separate piece of craft, but a massive wall of sandstone, like the rest of the walls of the choir, though carved and gilded with the ornamental and symbolic forms which complete the sacramental story. In the centre is the Crucifixion and below the Last Supper. The Nativity, the Transfiguration, Christ in Gethsemane, the Carrying of the Cross, the Deposition and the Resurrection complete the carved scenes on the reredos. They are the work of Walter Gilbert and Louis Weingartner, who also modelled the novel altar rail, ornamented with statuettes recalling the commandments of the Decalogue. At the head of the "east" window is Christ in Glory, with the archangels Raphael, Michael, Gabriel and Uriel below. The rest of the window pictures the Glorious Company of the Apostles, the Goodly Fellowship of the Prophets, the Noble Army of Martyrs, and the Holy Church throughout the World. A modern note is struck by the inclusion of John Wesley and Keble, the hymn-writer, among the prophets, and Bishop Hannington of Uganda among the martyrs. In the fourth



LIVERPOOL CATHEDRAL : THE REREDOS

Stewart Bale

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LIVERPOOL CATHEDRAL

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light—the Church throughout the World—are Roberts of Kandahar, a Christian soldier, and John Sebastian Bach, a Christian musician. The lighting of the cathedral reaches its maximum intensity in the transepts, where the tall windows lighting the central square are of silver glass. It is subdued in the sanctuary, that the carved story of the reredos may make its due effect, unspoilt by the glow of the "east" window.

And, lastly, the significance of Liverpool Cathedral, as a whole, by virtue of the communal effort which it enshrines, rather than the conception and craft of the architect and his assistants ! St. James's Mount is a site with almost as much natural beauty as the low hill upon which Durham rises. The Mount was once a stone quarry, and, to-day, it rises sheer from the green cloak of sycamore, thorn and mountain ash, with which time has covered the rocky ravine. On the opposite side of the hillock there is a gradual descent to the Mersey. The great, central tower, with the nave and choir reaching out on either hand, will dominate the houses and factories of the city, but they will remain a part of it. In the words which Archbishop Cosmo Lang used during the Consecration service :

" As it stands on its rock above the ebb and flow of the city's river, so its witness will stand above the ebb and flow of the city's life, consecrating, uplifting, guiding. There are central homes of the city's government and merchandise and art and learning ; let this be the central home of the city's soul. Here its citizens will see the beauty and hear the laws of that city whose maker and builder is God—the city which must even come down from heaven to transform the cities of the earth. Men going down to the seas in ships, moving westward in quest of a new home, will keep this building in their lingering gaze, and they will be reminded that, though here we have no continuing city, we seek one which is to come. Returning after their voyaging, men will behold it shining in the eastward light, and they will have a vision of that last haven where we would be when the voyage of life is ended. As men look across the river from the other side and see it rising above the harbour and the houses, wreathed in the smoke of the city's industries, sometimes, perchance, the old words will come back to them—' Upon the north side lieth the city of the great King, God is well known in her palaces as a sure refuge. Mark well her bulwarks, set up her houses ; that ye may tell them that come after. For this God is our God for ever and ever. He shall be our guide unto Death.' "

Spurred by the example of the Anglican community in Lancashire, the Roman Catholics of Liverpool have determined to build an even bigger cathedral on Brownlow Hill, a site which will also dominate the city and harbour, as does St. James's Mount. Sir Edwin Lutyens designed a church in a neo-classical style, the basis being a Latin cross, surmounted by a central dome, following the style of Raphael's design for St. Peter's, Rome. The 168-feet dome will be the largest in the world, even larger than the 150-feet dome at Bijapur. Whereas the

area of St. Peter's, Rome, is 227,000 square feet, that of the Catholic Cathedral at Liverpool will be 216,500 feet, or more than twice the area of Sir Giles Scott's cathedral. No church in the world will have a larger congregation space; 10,000 worshippers will be able to follow the rites at the High Altar at one time. Instead of the local red sandstone which Sir Giles Scott has used, Sir Edwin Lutyens proposed to build with brick and granite. After his death Sir Edwin was succeeded by Mr. Scott, a brother of Sir Giles Scott, architect of the Anglican Cathedral.

Among the problems facing architects in all parts of Europe that of replacing the blitzed churches is outstanding. Coupled with it is the need for building churches to meet the growth of population and the rise of industrial centres, which will often be far removed from the large towns of the pre-war era.

Characteristic of the problems arising from the churches which suffered under the German air attacks is Sir Giles Scott's plan for rebuilding Coventry Cathedral. The east and west ends of the old cathedral have survived and Sir Giles proposes to build his new church across the cleared space, so that the new cathedral will lie north and south, instead of east and west. The old five-sided apse will be used as a choir school and what remains of the old nave will form an open garden cloister. Characteristic of what may well be a new mood in church building will be a Chapel of Unity and a Christian Centre of Service, attached to the Cathedral but belonging jointly to the Free Churches and the Church of England. The scheme is part of a movement towards Christian unity and justifies a joint appeal for funds for rebuilding the bombed cathedral, addressed to Free Churchmen as well as Anglicans. Reinforced concrete will be used instead of brick, in an effort to combine lofty proportions with a wide interior space, a necessity in a large civic building.

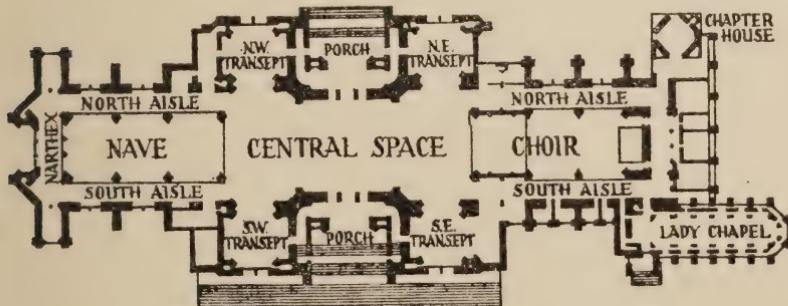
So our argument returns to the conclusion reached in the introduction to this story of the House of God in many lands and at many times—the necessity for once more allying the faith of the many with art in all its forms. What has been said of Westminster Cathedral, St. John the Divine, New York, and the two Liverpool Cathedrals suggests that architects, builders and decorators can still work together for a communal end, which may rightly be described as of the people and for the people. The last original architectural style, the Renaissance, was developed by men who regarded the State as the property of a ruling family. Slowly this idea of the State as the personal property of its ruler has passed away. In the eighteenth century a European ruler wished to be a despot, but he could not forget that he had to justify his ambitions by increasing the security and prosperity of his subjects. In the end, the very increase in material prosperity made the middle-class merchant or tradesman insist upon his right to be heard in the management of national affairs. So the era of Revolution and Reform was ushered in. To-day, the insistent recognition of the worth of the individual has led many artists to neglect the equally vital truth that complete personal liberty is impossible, since the basis of religious art



ROMAN CATHOLIC CATHEDRAL, LIVERPOOL

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is a partnership between the artist-producer and his clientele, the public. At the same time the decay of royal patronage has destroyed the ages-long system under which architects and decorative craftsmen were trained in connection with their jobs. Fortunately, the builder of Liverpool Cathedral has adopted the earlier and sounder method, and his success is of the happiest augury. If Sir Giles Scott proves himself another William of Wykeham or Wren, it will be by virtue of what he learnt during the years Liverpool Cathedral was in the building, and not by the brilliance of the design which established his professional reputation. To the necessity for training architects and craftsmen in connection with actual work must be added the desirability of continually enlightening the public regarding the interest and significance of architecture and its subordinate crafts. Well-illustrated text-books and periodicals, and the active influence of such professionals as Sir Thomas Jackson, Sir Banister Fletcher, Sir Reginald Blomfield, W. R. Lethaby and Professor F. M. Simpson in England, and Dr. Cram in America, have done much to foster an enlightened public opinion. Finally, there is the spiritual aspect. When those who worship seek in a House of God the shadow of the beauty, the love and the wisdom enshrined in the idea of the God-man, religious architecture will, in truth, have a new birth. When what is best in art is allied with what is noblest in thought and feeling, a House of God will arise equal in beauty and significance to any in the long history of the craft.



LIVERPOOL CATHEDRAL

(see page 290)

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